Developing a researcher identity as teacher educator

Swennen, A.; Geerdink, G.; Volman, M.

Published in:
Teachers and teacher educators learning through inquiry: International perspectives

Link to publication

Creative Commons License (see https://creativecommons.org/use-remix/cc-licenses):
CC BY-NC

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (http://dare.uva.nl)

Download date: 05 Feb 2020
Developing a Researcher Identity as Teacher Educator

Anja Swennen¹
Gerda Geerdink²
Monique Volman³

¹VU Amsterdam, the Netherlands; ²University of Applied Sciences, Nijmegen and Arnhem, the Netherlands; ³University of Amsterdam, the Netherlands

Abstract

In this paper we examine the development of the professional identity of teacher educators who combine studying for a doctoral degree with working as teacher educators. While working on their doctoral thesis, teacher educators move temporarily from the semi-academic world of teacher education into the academic world of universities. Semi-structured interviews were held with fifteen teacher educators. Although the research topics, their experiences in conducting research and their professional life after obtaining the doctoral research degree differ in many ways, they all stated that they have developed a researcher identity as part of their former identity. Nevertheless none of the teacher educators, except one temporarily, made a job shift towards the academic world or wished to do so, after finishing the doctoral thesis. They preferred the semi-academic world of teacher education where the focus is on education. In this world, practice-based research – if they are engaged in research at all - is a minor part of the work of teacher educators.

Keywords

Introduction

In this paper we examine the development of the professional identity of teacher educators who work in institutes for primary or secondary teacher education and combine their practical work with conducting academic research. The Netherlands has a binary system of Higher Education with traditional research university and Institutions of Higher Vocational Education that are called Hogescholen, which can be compared with Högskoler in Norway or Hochschuler in Germany. The core business of the traditional universities is to conduct academic research and to be responsible for the education of academic students. Hogescholen are large institutions and members of staff are first
and foremost responsible for high level professional education in economical, technical, agricultural, health and educational sectors. The teacher educators in our study work at primary and secondary teacher education institutes which are situated within these Hogescholen.

Until recently, as their colleagues in other sectors of the higher vocational institutes, teacher educators working in Hogescholen, were not expected to engage in research and seldom did so. Since 2000, however – stimulated by social and economic changes - these vocational institutes are expanding their ambition as so called ‘knowledge centers’ (Geerdink, Boei, Willemse, Kools, Q., & Van Vlokhoven, 2016; Weert & Leijnse, 2010). With (only little) financial support of the Dutch government they develop as Universities of Applied Sciences (UAS’s) which involves a (practice-based) research task. The research task is limited in scale compared to the core business which remains educating future professionals.

To enhance the quality of these UAS’s in general and teacher education in particular, the Dutch government has expressed the ambition to improve the quality of teacher education by raising the formal education level of teacher educators and developing teacher educators’ research capacities. By 2020 all lecturers working at the Universities of Applied Sciences - and this includes the teacher educators - need to have a masters level degree and at least ten percent of teacher educators must have a doctoral degree (Ministerie van Onderwijs, Cultuur en Wetenschap, 2011). Several measures have been taken by the Dutch government and the UAS to reach these goals in teacher education, such as providing grants for individual teacher educators to study for a master or doctoral degree and support for teacher education institutes to enhance the research capacity of teacher educators. As a result of these developments, teacher educators are increasingly engaged either in practice based academic research conducted in the ‘knowledge centres’ of the UAS’s or in doctoral research that can currently only be obtained from traditional universities.

As in other European countries, there are in the Netherlands two ways to obtain a doctoral degree. The most common way, mostly for young researchers is as a regular PhD-student. These young researchers receive a low salary at the university as junior member of a scientific staff or research group, under the guidance of a full professor and his or her team. The subject of their PhD-research fits within a research program of an established research group and is financed by grants from the Dutch National Research Institute or other sponsors. These PhD-students can therefore work full-time on their research and participate in national and international PhD-courses. The findings of the doctoral research are jointly published by the PhD-students and their supervisors in international scientific journals and as such PhD-students are important for full professors. Their research project is seen as a first step of a scientific career.
The second avenue to obtain a doctoral degree is more often chosen by mature persons from outside the university, who need to combine their regular work with a doctoral research. They often have a job outside the university. They may have a grant from the government or financial support from their boss or other sponsors but that is not regular and mostly not enough for the whole project. These doctoral researchers choose their own research subject, mostly related to their daily work and ask a full professor from a university as supervisor for their research. The thesis of these mature students is often published as a monograph in Dutch.

The teacher educators, we followed for our research are members of the second group. They all started and combined their PhD research while they were working as teacher educator. Most of them had a combination of grants and also invested their own time and money.

While a doctoral degree only can be obtained at a traditional research university, the teacher educators who study for a doctoral degree constantly move, both physically and mentally, between their familiar world in which the focus is mostly on teaching (and all connected tasks), to the academic world of the traditional university where the focus is on research, publishing and intellectual and academic discussion. We wonder what this means for their professional identity.

Crossing borders between academic and semi-academic worlds

Within cultural-historical views, the development of a professional identity is not an isolated and idiosyncratic process but a concept that “combines the personal world with the collective space of cultural form and social relations” (Holland, Lachicotte Jr., Skinner, & Cain, 1998). Holland et al. refer to these collective spaces as cultural worlds. The professional identity of teacher educators is shaped by their participation in the professional cultural world of teacher education. Teacher educators develop a professional identity that reflects the tasks they perform such as teaching about teaching, supervising student teachers, curriculum development and organizational tasks (Swennen, Jones, & Volman, 2010). Teacher educators who study for a doctoral degree not only gain new knowledge and develop new skills, but they also need to develop a new professional identity as researcher (Murray & Male, 2005). The development of a professional identity as researcher is initiated and intensified when role transition takes place from being a teacher educator to being a researcher (Ibarra & Barbulescu, 2010).

Teacher educators who want to obtain a doctoral degree have to learn what it means to be a researcher, to experience what a researcher does, and they learn to act upon their understanding of what it means to be a researcher. To do this,
they have to learn to relate to the existing traditions, customs, and the written and unwritten rules of the academic world (Pennuel & Wertsch, 1995). In order for this role transition to occur, teacher educators cross the metaphorical boundary between the semi-academic or practical world of teacher education and the academic world of the traditional university. Akkerman and Bakker (2011, p. 133) define boundaries between cultural worlds as “socio-cultural differences that cause discontinuity in action or interaction”. Crossing borders leads to broadening horizons and to learning (Wenger, 2000) which in turn affects the professional identity. However, border-crossers do not have an easy task as they enter unknown territory where knowledge and skills are expected which they do not yet possess.

Akkerman and Bakker (2011) distinguish four mechanisms that explain learning processes when professionals cross boundaries between different worlds. Each learning mechanism has its own characteristic processes and results for participants and practices.

- **Identification**: This learning mechanism includes the identification by the boundary crossers of the different interests from educational practice and the academic world. This results in having a better understanding of the position of oneself and the boundaries of the activity system one is part of.

- **Coordination**: Coordination entails boundary crossers who overcome the boundary of two or more activity systems, resulting in effortless movement between different worlds. Coordination is associated with role transition. These boundary crossers put their original practice to the background, at least temporary. As experiences with a new practice increases, the less difficult the role transition will be.

- **Reflection**: By reflecting on their practice, boundary crossers can obtain an expanded set of perspectives. This results in a construction of a new identity of the boundary crosser as this involves a new understanding of others and the two cultural worlds.

- **Transformation**: This learning mechanism includes confrontation with boundaries of the existing activity systems and leads to changes in these activity systems, potentially to the emerging of a new in-between practice.

While involvement in research by teacher educators is supported with time and money aiming to improve the quality and status of teacher education and teacher educators, we know little of how research affects the professional identity of teacher educators who cross boundaries between their workplace and the traditional university and how this boundary-crossing activity affects these two cultural worlds. The two main questions that guide this study therefore are: ‘How does the professional identity of teacher educators develop while they study for their doctoral degree and move between the semi-academic world of teacher
education and the academic world of the traditional university?’ ‘And how does this boundary-crossing activity influence practice in these worlds?’

Method

Our study can be characterized as narrative research (Clandinin & Connelly, 2004). Participants were invited to talk about their own experiences, beliefs and concerns. Data were collected by means of semi-structured interviews consisting of three parts: 1. the motives and start of the research, for example: what made you decide to start the doctoral study? 2. The ongoing development as researcher, for example about the progress, including continuing support, publications and presentations of the research, problems and successes. 3. The development as researchers after the doctoral degree was completed. For all three episodes questions were asked about crossing boundaries between the two cultural worlds and how the research impacted these worlds.

The number of teacher educators who finished a doctoral thesis in The Netherlands is still small. We found and asked fifteen teacher educators from our own professional networks to participate in the study. As far as we know these are all teacher educators that obtained a doctoral degree while working as a teacher educator from 2002 until 2015. All participants are 45 years and older and they have from 10 to 35 years of experience in teacher education. Within this group sexes are equally divided, which seems representative for teacher educators in The Netherlands (there are no statistics available about Dutch teacher educators). The teacher educators teach in Primary Teacher Education (7) and Secondary Teacher Education (8) in a variety of subjects, although Educational Studies (6) and Dutch (3), both important subjects in teacher education, are dominant.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Subject</th>
<th>Level TE</th>
<th>Years in TE</th>
<th>Year of doctoral degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben</td>
<td>Male Dutch</td>
<td>primary</td>
<td>18</td>
<td>2005</td>
</tr>
<tr>
<td>Clifford</td>
<td>Male Educational Studies</td>
<td>secondary</td>
<td>10</td>
<td>2014</td>
</tr>
<tr>
<td>Cynthia</td>
<td>Female History</td>
<td>secondary</td>
<td>15</td>
<td>2014</td>
</tr>
<tr>
<td>Ellen</td>
<td>Female German</td>
<td>secondary</td>
<td>10</td>
<td>2014</td>
</tr>
<tr>
<td>Emily</td>
<td>Female Dutch</td>
<td>primary</td>
<td>29</td>
<td>2011</td>
</tr>
<tr>
<td>Frits</td>
<td>Male Educational Studies</td>
<td>secondary</td>
<td>28</td>
<td>2010</td>
</tr>
<tr>
<td>Irene</td>
<td>Female Dutch</td>
<td>secondary</td>
<td>33</td>
<td>2007</td>
</tr>
</tbody>
</table>
The interviews took between one hour and a half and two hours and were transcribed verbatim. The analysis was a combination of reading, reflecting, discussing and categorizing (Miles & Huberman, 1994) conducted by two researchers. Eventually we developed relevant themes that covered the interviews and answered our main questions.

**Results**

**Entering the academic world**
Without exceptions all teacher educators in our study have a strong identity as teacher educators when they start their doctoral study. They are active and excellent teacher educators who are leading when it comes to the improvement of teaching and supervising student teachers, the curriculum of teacher education and organization of their institutions. They participate in (teacher) education organizations and work on a national and international level on projects. The teacher educators mentioned as their motivation to start the doctoral research the need for a new challenge in their work. However, the main reason for all to start the doctoral research was first and foremost to contribute to the improvement of their own teacher education institute and their own practice as teacher educator. This was often more important than conducting research or obtaining the degree.

*I wanted to do more with the theory in our teacher education program. And that became my research theme. (Wendy)*
I wanted to gain new knowledge. Not so much to do research, but to initiate development. (Emily)

Most of the teacher educators had a connection of some sort with the academic world of the traditional universities before it came to this PhD project. Irene, Leonore, Ben and Emily started a doctoral research before, but they did not finish it. Two teacher educators participated in the knowledge centers at their own teacher education institution. All participants knew their supervisor from their own master study or had collaborated in joint projects.

The eventually chosen research subject was predominantly part of their daily work. Mary participated in a research community within her teacher education institute and had to study a topic that fitted this group. Lars and Manfred chose a topic in consultation with their supervisors. All other teacher educators chose the subject of their research themselves. Apart from Leonore, Ellen and Cynthia, who studied a subject that was related to their former master research, all educators choose a subject that aimed at improving teacher education. Clifford, Pete and Frits wrote a doctoral thesis based on published articles in English - which would be normal for PhD-students in the Netherlands - but all other educators wrote a monograph in Dutch. Unlike regular PhD-students none of the educators participated in an academic research group at the university and none took part in courses for PhD-students.

As the Dutch government wanted more lecturers in Universities of Applied Sciences with a doctoral degree and supported the Universities of Applied Sciences financially to reach the goals, the managers of teacher education institutes supported teacher educators who want to study for a doctoral degree. Both the participants and their managers were not always aware of the time that is needed for research. Some teacher educators were allocated three days a week for their research, others two or even one day and they worked the rest of the time as teacher educator. All teacher educators invested huge amount of their private time, evenings, weekends and holidays, in their doctoral research.

My boss supported this but at the time that I started it became clear that it means a lot of your own spare time. On his invitation for others to do the same there was no reaction at all and no one to follow my example although he stimulated my colleagues to do so. They had seen how much work I had to do and that I had to offer all my Holidays. No one was eager enough to bring the same sacrifices. (Irene)

Managers had little understanding of the academic world. Irene's request to be given time and money to start a doctoral research was immediately approved
by her manager. It subsequently became apparent that he thought that she had asked for time and money to support promotion activities for the Primary Teacher Education institute to attract more students. The Dutch word for receiving a PhD is to be ‘promoted’ (to Doctor). Clifford also complained that his manager did not understand what a doctoral degree was about. His manager was very surprised and even upset that Clifford’s research proposal had to be approved by his supervisor, a full professor, and not by the management of the Teacher Education Institute.

**Developing a researcher identity**

Once they had started the doctoral research, the teacher educators in our study began their boundary crossing activity between the semi-academic world of teacher education where they worked and the academic world of the university. The teacher educators had to find a way to reconcile the different cultural traditions of the two worlds and developed a researcher identity by adapting to the traditions of the academic world. The teacher educators remembered very well the moments they were first identified with being a researcher. Milestones in this development were different for each teacher educator. For Rita this was when she started the research, for others when they presented their first paper at a conference and discussed it.

*For the first time I had to present a paper at a scientific conference and I have fixed it, but with mixed feelings. It was a totally new task for me and I do understand that it is necessary to exercise these things but I had to be prepared for this. It differs quite a lot from giving a lecture.* (Leonora)

*My first presentation was an important moment. I realized that presenting for scientists is something different, they want to know how you have done your research, your methodology. That differs from presentations or lectures for colleagues. They are only interested in my findings and conclusions, not in the way I came to it. That means two totally different things.* (Mary)

The first accepted and published articles or the request to review articles were also seen as moments the teacher educators felt they were becoming researchers. Also, doing the work of a researcher, like studying, reading papers, writing (English) articles or collecting and analyzing data, made the participants aware of their new identity, but it is a fragile identity.

*Being at a scientific conference I realized how lonely it was to be a researcher. Nobody around to share your feelings.* (Emily)
The stories of the teacher educators made it clear that their supervisors played an important role in socializing the researchers into the academic world. These supervisors supported them in doing their research and in academic writing, but apart from this support working on the doctoral research was a lonely enterprise for most. None of the teacher educators became a member of a research group at the university and none participated in courses as regular PhD-students do. The supervisors encouraged the educators to present their work at conferences and many did so. Visits to national and international conferences were always supported by the management – but the teacher educators went there on their own or with their supervisors.

In their workplaces, the semi-academic world of teacher education, their needs as researcher were often denied and neglected. The management had little knowledge about research and about what was needed to conduct research. While some had a manager that supported them throughout the trajectory, most others had to deal with managers who had not only little interest in what they were doing, but also urged them to finish quickly and come back to their normal work.

There were no colleagues, or only a few, with whom they could identify with as researchers. Most of their colleagues had little knowledge of the academic world and they appreciated that the doctoral researchers were given this chance as a reward for their hard work. Their interest and support concerned the fact that they were doing something special, not the research itself. One of the participants won an award for the best article in a renowned international journal, but he could not share this with his colleagues as they did not know the journal, and did not understand what it meant to publish and receive such a prestigious award. The teacher educators suffered from this lack of interest by their colleagues in the content of their research. This was especially difficult, because they studied work-related subjects and were strongly committed to improve teacher education. Their ambition was not always recognized and this caused frustration, especially when they did not get the position they hoped for after they finished. Clifford had to accept that an expert from outside was appointed in his field of expertise and Lars was frustrated because his attempts to continue his research were not successful. Management and colleagues admired the participants, but were hardly interested in the results of the research or the recommendations that were formulated for teacher education.

*It was disappointing that there was only little interest for my research in our institute. My manager allowed me only twice to deal the – relevant for practice – findings with my teacher educator colleagues. But always at the end of the day and I had to promise in advance to keep it short and practical. (Lars)*
...one of my colleagues who just started a study to earn a master degree and for that reason got informed about different degree's, asked me if am not interested in something like he does. He did so after I finished my PhD. (Leonore)

Towards the end of the trajectory of completing their doctorate most participants encountered problems. For some time was running out and for others change in management meant that time and other resources were cut back. These teacher educators had to take unpaid leave to continue their research. Management and colleagues became impatient as the work was increasing and they were still covering for the researchers.

The ceremony in which doctoral students receive their doctoral degree is quite impressive in the Netherlands: it is a traditional and public transition ceremony that takes place in the main hall of the university with a large group of professors, family, friends and colleagues. The teacher educators mention this as a moment at which they felt they were a researcher. Some felt that such transitions - marked by ceremonies and rewards - are available for researchers, but not for teacher educators. They felt very proud to be part of such ceremony. The teacher educators developed an identity that made them different from their colleagues. This new identity, being a researcher, made them feel privileged but also slightly guilty about the time and money that was spend on them.

After the ceremony: scholarly teacher educators
All participants underlined, some passionately, that they developed a researcher identity as part of their broader professional identity as teacher educator. They became scholarly teacher educators and that is perceived as the most rewarding aspect of their research. Some emphasize that their identity as teacher educator has been strengthened by their experiences as researcher and their increase of knowledge about teaching and teacher education. After receiving their doctoral degree all, but one, of the teacher educators returned full time to their work in teacher education. Pete worked as a full time researcher at a university for one year, but he did not enjoy what he felt was the lonely world of research and writing. He missed working with students and returned to the teacher education institute. He realised that he belonged to the teacher education world where he was still able to conduct some research-related activities. Most participants tried to find ways to combine their work as teacher educators with involvement in practice based research.

I feel that I am a teacher educator, that fits better than being a researcher. I am something like a scholarly teacher educator. I don’t want to choose between research and my practical work as teacher educator, I want a combination. The real flow is in the teacher education institute, not in the university. (Frits)
Two teacher educators wrote articles with their supervisors, but all others lost contact with their supervisors – who were their sole link to the academic world. Some participants visited the Dutch research conference once or twice after they finished, but they did not feel at home and did not continue to go there. None of the participants were involved in academic research at their teacher education institutes, but only Ben regrets this. Jean and Irene were given research positons and were involved in practice-based research. Most others would like to have time to conduct practice-based research, but they were not given time and resources to continue their research.

I work as a teacher educator and my research activities are meant to help the students. There is progress though not as much as I want. It is always three steps forwards, two backwards. (Irene)

The findings of the doctoral studies hardly ever led to the recommended changes that in practice and programmes. The government wants more doctoral teacher educators, but within the semi-academic world of teacher education there does not seem to be a demand for a more research based culture.

As I do not own any key position in my institute I have no influence in decision taking. Although very relevant for the teacher education practice, my results were neglected in my own institute. (Ben)

All participants felt that their identity as teacher educator had been enhanced and enriched by their experiences as researchers and they wanted to make use of these experiences. Although they were disappointed not to continue to do research any more, there newly developed skills and status were recognized by their management for practical use. Most had been given more interesting and challenging work than they had before they started their doctoral research. They had a range of new roles including: supervising research of the undergraduate student teachers; head of a masters level course; coordinator of large local and national projects; and some were active in the professional development of their colleagues, especially in the field of research capacity building.

Conclusion and discussion

We studied the development of the professional identity of fifteen Dutch teacher educators who combined working in the semi-academic world of teacher
education with doing their doctoral research in the academic world. The first research question was “How does the professional identity of teacher educators develop while they study for their doctoral degree and move between the semi-academic world of teacher education and the academic world of the traditional university?” All participants had a strong identity as teacher educators and this identity remained strong throughout the trajectory. During the years they studied for their doctoral degree, the participants developed an identity as researcher as part of their identity as teacher educator.

After completing their doctoral degree all teacher educators in this study went back where they felt they belonged. They tried, some more successfully than others, to profit from their newly acquired researcher identity and tried to find other projects in which to apply their research skills and theoretical knowledge. They are convinced that with their scholarly teacher education identity they can contribute to the improvement of teacher education.

The second research question was “How does the doctoral research of the teacher educators in this study influence the practice in the semi-academic world of teacher education and the academic world of the traditional university.” The teacher educators were granted partial and temporary membership into the academic world. Partial, because they were never socialized fully into the academic world for two reasons. First, because the teacher educators kept a strong identity as teacher educator and developed an identity as researcher as part of their identity as teacher educator. They refer to themselves “scholarly teacher educators” (see also Cochran-Smith, 2005). Second, because they were supported by their supervisors to obtain their doctoral degree, but were not prepared to work at the university as researchers. The membership of the teacher educators in the academic world was temporary because after obtaining their doctoral degree all teacher educators became full time teacher educators again with very limited or no connection to the academic world.

The partial and temporary access to the academic world also led to partial identification (Akkerman & Bakker, 2011) of the teacher educators with the identity of researcher. They have an increased knowledge about what it meant to be a researcher and about the differences between the two cultural worlds. There was no full role transition – and therefore no question of “coordination”. The teacher educators valued their identity as scholarly teacher educators and do not regret their coming back full time to teacher education, but they do regret that their teacher education institutes did not recognize their increased abilities and ambitions as researchers.

The teacher educators in this study individually crossed the boundary into the academic world, but the context to which they returned - their teacher education institutes at the Universities of Applied Sciences - remains semi-
academic. As a result of their doctoral study, the teacher educators in this study are able to reflect on both worlds and have an increased understanding of the boundaries. They also have as boundary crossers new knowledge and skills that originally belonged to the perspectives of the academic world (Akkerman & Bakker, 2011).

The two cultural worlds, however, did not transform as a result of the boundary crossing of the individual teacher educators. The academic world became closed to them after they obtained their degree and seems to have been unaffected by the teacher educators. The semi-academic world of teacher education was changed by the boundary-crossers as their work changed, became more interesting and challenging and now includes some ‘in-between activities’ as supervising student research and facilitating research-oriented professional development for teacher educators.

The researcher identity of teacher educators is ignored or only partially acknowledged within the world of teacher education, because management and colleagues are unfamiliar with research and teacher educators are not supported to develop further as established researchers. The divide between teacher education and the academic world is still strong (Zeichner, 1995). These circumstances make the development of a researcher identity much more complicated if not impossible for teacher educators compared to regular doctoral research students (Lave & Wenger, 1991).

The teacher educators we studied were among the first who studied for their doctoral degree. In the future many will follow and it is important to know how all are involved in it: supervisors, managers, or colleagues, can contribute to enhance the researcher identity of teacher educators. Investigating the identity of the fifteen teacher educators has provided us a better insight in the development of a researcher identity of teacher educators and the way this identity is influenced by the cultural worlds in which they work. Findings suggest that teacher education institutes in Universities of Applied Sciences do not take full advantage of the knowledge and skills of teacher educators who have a doctoral degree and are able to combine being a teacher educator with being a researcher. This situation in the Netherlands seems close to the experience of lecturers in nursing and midwifery in the UK where Boyd and Smith (2012) in a national survey found that lecturers did just enough to keep the institution happy and then subverted the researcher identity to continue focusing on their other identities as nurse educators.

More research may help understand how teacher educators themselves, supervisors in the academic world and managers and colleagues in the semi-academic world of teacher education understand what teacher educators with a doctoral degree need to develop a strong identity as teacher educator and researcher who are able to benefit from and contribute to both worlds.
New research may also shed light on the impact of scholarly teacher education on the quality of the teachers they educate. Will teacher education as a whole become more research based and will individual teachers be able to incorporate results from research in their work or do research to inform their practice? And if so, will this benefit the generations of pupils that they teach?

References


Devoloping a Researcher Identity as Teacher Educator


