THE AMERICAN
UNIVERSITY IN CAIRO

Bringing Theory and Practice Closer in Teacher Learning:

Partnerships Between Faculties of Education and Schools in Conducting Practicum, Continuing Professional Development and Action Research

Foreword by Malak Zaalouk (Project Leader)

Authored by Eleanore Hargreaves,
Maria Kambouri,
Pete Bradshaw,
and Michelle Attard

Co-funded by the
Tempus Programme
of the European Union

Bringing Theory and Practice Closer in Teacher Learning:

Partnerships between Faculties of Education and Schools in Conducting Practicum, Continuing Professional Development, and Action Research

Foreword by Malak Zaalouk (Project Leader)

Authored by Eleanore Hargreaves,
Maria Kambouri,
Pete Bradshaw,
and Michelle Attard

First published in 2016 by
The Middle East Institute for Higher Education
Graduate School of Education
The American University in Cairo
AUC Avenue. P.O.Box 74. New Cairo 11835. Egypt.

Copyright © 2016 by The Middle East Institute for Higher Education

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

Designed and Printed in Metropole Advanced Printing Facilities
Cairo, Egypt.

27064 / 2015
ISBN: 978-977-416-791-1

Disclaimer:

“This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.”

TABLE OF CONTENTS

Foreword 5

LIST OF ACRONYMS 11

SECTION I. UNIVERSITY–SCHOOL PARTNERSHIP: RESEARCH AND BEST PRACTICE 13

SECTION II. PRACTICUM: RESEARCH AND BEST PRACTICE 27

SECTION III. CONTINUING PROFESSIONAL DEVELOPMENT: RESEARCH AND BEST PRACTICE 53

SECTION IV. ACTION RESEARCH: RESEARCH AND BEST PRACTICE 71

SECTION V. SUMMARY OF INDICATIONS FOR POLICYMAKERS 97

APPENDIX I: RESEARCH LITERATURE RELATED TO ACTION RESEARCH 101

APPENDIX II: CASE STUDY OF EFFECTIVE PARTNERSHIP 107

FOREWORD
by Malak Zaalouk

This is the first of two volumes produced within the context of a three-year TEMPUS project entitled *"Capacity Development of Faculties of Education CDFE in International Approaches to Teacher Education".*

This foreword is not an introduction to the volume in the academic sense of the term, but rather a brief statement by the project's coordinating institution and Primary Investigator (PI) about the purpose and spirit with which the project was designed.

For some years, education has been high on the agenda of heads of state, policy makers and civil society, on the international, regional and national levels. Most reforms have emphasised the importance of teachers and, more specifically, the critical impact that teacher preparation is proven to have on student learning (Darling-Hammond, 1997). Research also suggests that, in addition to teacher preparation, the quality of learning largely depends on Continued Professional Development (CPD) (OECD/WB, 2014). Moreover, preparing and empowering educators through lifelong learning is a complex undertaking that includes induction and mentoring at entry point into the profession. It is a long learning journey that starts with university preparation but continues through the career development path of each professional. It has various configurations, but most importantly is seen in school and in partnership with universities. The best CPD programmes highlight what great instruction looks like through curricula and pedagogy, impart educators with the knowledge and capacity to deliver exemplary instruction, build practical skills through professional development opportunities, support educators with good mentors and coaches, select and develop good instructional leaders who focus on instruction while creating learning communities, and enable educators to learn from each other (Barber and Mourshed, 2007). Many international task forces and initiatives have been established in the last fifteen years to support teachers at the heart of educational reform in Europe and elsewhere (UNESCO, 2014; Twining, et al., 2013; Haigh, et al., 2013).

In recent years one of the lead bodies for the Arab region, the League of Arab States (LAS), developed visions and strategies to promote quality educational reform and research. These two concerns have featured in every single Arab Summit meeting since 2006. In fact already in 2005 a department for education and scientific research was created at LAS to support the new policy direction. In 2006, LAS and various other regional bodies, such as the Arab League Education Culture and Science Organization (ALECSO), the Arab Bureau for Education in the Gulf States (ABEGS), the regional offices for the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the regional office for the United Nations Children's Fund (UNICEF) joined hands in a partnership to enhance the quality of education in the Arab world (League of Arab States and UNICEF, 2010). The partnership chose teachers as their entry point for the purposes of bringing about reform. Several studies were conducted and compiled to further understand the status of teachers, their training and performance in the region. Studies on Arab universities have highlighted the fact that these relatively recently established institutions work in very complex contexts, and that although their numbers are rapidly proliferating they face considerable challenges with regard to the quality of their programmes, autonomy and governance (Mazawi, 2005; ElAmine, 2014; Al-Hroub, 2014). More specific studies on faculties of education clearly pointed to the fact that the Arab world in general suffers from weak professional development programs. Curricula in university faculties of education are not updated and do not emphasize innovation, critical thinking, reflection, research and problem solving. There is a weak link between theory and practice, and on-the-job CPD is very limited (Zaalouk, 2013). The situation is further aggravated by the low status and salary accorded to teachers (Farag, 2010; Herrara and Torres 2006).

During later stages of the joint initiative on teacher enhancement led by the LAS, UNICEF, and the Middle East Institute for Higher Education (MEIHE) at the American University in Cairo (AUC), there have been many positive achievements in terms of advocacy and the production of a guiding framework for teachers' professional development. Since 2008, the initiative has been developing the capacity of two regional centers of excellence to enhance the professional development of teachers: one in Egypt – the Professional Academy for Teachers (PAT) and one in Jordan – the Queen Rania Teacher Academy (QRTA). The advocacy from the regional teacher initiative overwhelmingly led by LAS, UNICEF and MEIHE, has made teacher preparation and enhancement a priority in all countries in the region. Moreover, other agencies have joined the reform attempts. The World Bank has launched the Arab Regional Agenda for Improving Education Quality (ARAIEQ) in partnership with ALECSO, UNESCO, the World Economic Forum, INJAZ al-Arab (a regional NGO) and QRTA in 2012. One of the main pillars of the initiative is 'Teacher Policies and Professionalization'.

Reforms have been attempted, but many more efforts are clearly needed in the way of internationalization, cultural exchange and learning within borderless communities through the acquisition as well as the production of both explicit and tacit knowledge. In October 2012, the MEIHE was awarded a -36month project entitled "Capacity Development of Faculties of Education CDFE in International Approaches to Teacher Education" (Project number 530614-TEMPUS-1-2012-1-EG-TEMPUS-JPHES). The project (abbreviated to CDFE) focused on building the capacity of selected higher education institutions. It focused on learning from good practices from the European Union (EU) in three strategic areas: action research, practicum and Continued Professional Development. In so doing, the project harmonized pre-university with higher educational reforms. It aimed at making the work of faculties of education relevant and integral to school-based reform. Through a collaborative network between faculties of education in some EU countries and some selected partners in the MENA/Arab region, the project aimed at enhancing the capacities of faculties of education in the latter. The project essentially aimed at rendering university faculties of education relevant to school and society. The goal is to strengthen the partnership between universities and schools through the organization of practicum, action research and Continued Professional Development. Schools are social institutions constituting the work place of future teachers. Effective teacher recruitment, employment, deployment and retention should begin with quality practicum during teachers' university years, followed by strong mentorship and professional development programmes during the early induction years, and continued lifelong learning through research during the mature years of teaching. Learning resulting from this project feeds into two regional centers of excellence: the Queen Rania Teacher Academy in Jordan (QRTA) and the Professional Academy for Teachers in Egypt (PAT) for sustainable capacity building of higher education institutions across the region.

The project partners constituted a total of 14 institutions from the United Kingdom (3), Sweden (1), Malta (1), Lebanon (2), Palestine (2), and Egypt (5). The following institutions were involved: The American University in Cairo as lead member; the University of Malta; the Institute of Education, now part of University College London; the Open University; the University of Leicester; Stockholm University; Université Saint Joseph; the American University of Beirut; Birzeit University; An Najah University, Assiut University; the University of Alexandria; Helwan University; and the Professional Academy for Teachers. The consortium of institutions in the partnership was carefully selected to ensure that expertise in all three strategic domains of intervention was covered. The University of Malta and several of the Egyptian universities who had begun some reform processes, such as the University of Alexandria and Helwan University, were chosen for their strength in the area of practicum. For Continued Professional Development, Leicester University, the Institute for Education in London and to some extent Bir Zeit University, An Najah University and Assiut University were selected. The Open University as well as Leicester University, the American University in Cairo, the American University of Beirut, and Université St. Joseph were selected for their expertise in the area of action research, while Stockholm University was chosen for its strengths in mentorship, educational research and documentation. Finally, partners such as the Professional Academy for Teachers (PAT) had a special status with the purpose of disseminating and sustaining results system-wide. The Queen Rania Teacher Academy in Jordan (QRTA) was also viewed as a complementary partner and an additional conduit for the dissemination of results. QRTA focuses on creating school networks; it performs activities aimed at sustainable continued professional development of teachers, the empowerment

of novice teachers and the establishment of regional communities of learning, which will focus on teaching, evaluation, and the improvement of educational and learning processes. QRTA hosted a project called the Arab Regional Agenda for Improving Education Quality (ARAIEQ), which supports and endorses policies related to professional development, and which is part of the Arab Coalition for education improvement. From a programmatic perspective, QRTA is diverse in its approach to programmes, responsive to research findings and allows for true participation from local and international partners. QRTA has a twinning arrangement with Teachers College, Columbia University. Meanwhile PAT's strategic directions, include: building partnerships with research and training institutions on the local, regional and international levels; reinforcing the bond between the Academy and faculties of education as well as research institutions and teacher professional development units within schools; providing capacity building to the teacher professional development units in schools; conducting training programs; and conducting action research within schools which will develop the teachers' research skills. PAT has managed relations with Cambridge University in the past and certain German higher education institutions as well as the General Teaching Council for Scotland.

The approach taken during the CDFE project was largely that of "internationalization", which I would like to distinguish from globalization in that the partners stressed the well-established tradition of international cooperation and mobility to enhance the quality of learning but were very careful to respect context and the individuality of nations. The learning was collaborative and respectful with a belief in education as a public good (de Wit, 2010). The project did not regard internationalization as an aim in itself but as a means through which to achieve reform and common developmental goals (Qiang, 2003). While globalization is the reflection of the hegemony and domination of a particular economic order which feeds largely on competition and disparity, internationalization in the context of this project allowed learning to be mutual and based on a two-way exchange of ideas. Moreover it did not focus on elite stakeholders, which would aggravate inequalities, but strived to be highly inclusive, allowing students to learn alongside faculty during the various exchange visits and the entire journey, and institutions at the periphery of the periphery to learn alongside the more globally established ones. While contexts differ greatly between and within countries and schools, meaning that international collaboration was not without its tensions, the team members managed to create a community of learners that upheld the value of learning very highly, while they dealt with each other with the greatest of respect, reciprocity and fairness. Innovative and diverse forms of collaboration were established while safeguarding local concerns. This project truly affirmed the values of the internationalization of higher education and promises to make room for a new generation of global citizens able and willing to advance social and economic development for all and promote humanist ideals as distinct from the pure economic benefits sought by the proponents of globalization (Altbach and Knight, 2007; Hudzik, 2011; International Association for Universities, 2012). Working with the CDFE team was both a joy and an honour.

In the early stages of the project each of the partner institutions was required to go through a reflective self-assessment exercise to produce a baseline study reflecting where they stood with regard to school–university partnerships, how they organized and conducted their practicum and field learning experiences, what action research if any they were involved in, and finally, how they participated in offering and supporting continued professional development. Select institutions were then tasked with producing three analytical reports and a handbook on global good practices with regard to university school-partnerships, practicum, action research and continued professional development. From the early stages of the project it was clear that the method of "tracking measures" was being adopted as opposed to simple performance measures or indicators. The benchmarking was established from the start so that, through regular monitoring, institutions could collect information on how they were faring on an ongoing basis and be measured against precise and explicit targets as outlined by the baseline and analytical reports (de Wit, 2010). The learning was further enhanced by a large mobility exchange set of programmes where country teams visited one another. This served many objectives amongst which were the transfer of tacit knowledge, cultural exchange and understanding, empathy, team building, and hands on experience. A total of 120 individuals were able to engage in North/South learning as well as South/South learning and enrichment. The programmes included lectures, discussions, exchanges, school and education institution visits. The exchange visits were always accompanied by reflection and assessment. In

addition, institutions committed to developing their improvement plans as an iterative process following each visit and opportunity to learn. These plans were taken very seriously.

Mid-way through the life of the project a conference entitled "Transformations" was held in Cairo. It was at this point that it became apparent how seriously the Institutional Improvement Plans (IIP) were being taken and what a powerful community of learners and practitioners was being established. Each of the partners shed light on their learning journey and the steps actually implemented and the amount of mutual support, encouragement and collaboration was very impressive. Another important landmark was a strategic planning meeting between partners, which also took place in Cairo, during which the lessons learned in all three areas of focus were seen to be embedded in the potential regional centers of excellence PAT and QRTA for dissemination and sustainability. Again, these were moments of impressive collaboration, respect, generosity and commitment to global citizenship. Deliberations were multi-lingual and the learning multi-directional.

During the life of the project many groups within the broader team developed collaborative research and published articles and papers about their findings. The initiative offered an empowering learning environment by creating mentoring relationships. It ensured that both faculties and schools become engaged in critical research methods. Qualitative research became more valued. Technology was introduced as a significant tool of capturing learning moments and relationships. Each participant from the south was equipped with video cameras to use, not just for regular documentation but for critical reflection and pedagogical reform. The initiative emphasized the value of action research and participatory training and workshops in school-based reform and in the potential relationships between schools and faculties of education. In specific situations new pedagogical relations between faculty members and school-teachers empowered both to reverse existing power relations and eliminate malaise between school and university. It encouraged faculty members to be more grounded in practice and school-teachers to be better framed and equipped with the kind of theoretical knowledge that would allow them to view their work in school in a broader societal context. The initiative offered plenty of space for dialogue, not only between faculty and school but also among various faculty members who were discovering one another in a new context for the first time even when they came from the same country or institution. Peer learning and dialogue were provided. At each juncture of the project, including annual management meetings, dialogue among all partners, as well as between faculty members and students during actual learning experiences, was encouraged. These meetings marked significant planning and learning moments.

This first volume produced by a collaborative effort of the CDFE team with special inputs from Eleanore Hargreaves, Maria Kambouri, Pete Bradshaw and Michelle Attard Tonna entitled *Bringing Theory and Practice closer in collaboration with Teacher Learning: Partnerships between Faculties of Education and Schools in Practicum, Continuing Professional Development, and Action Research* is divided into five sections, one each on university–school partnerships; practicum; Continued Professional Development; and action research; and a fifth and final section offering a summary and indicators for policy makers.

Special thanks is due to Eleanore Hargreaves for reviewing this volume. Special thanks is also due to Dana Sabah for her assistance during the project.

The volume was designed for multiple audiences and to serve diverse purposes. It addresses students of education and faculty and offers the best practices globally in each of the domains. It can therefore be used as an academic handbook by both university and schools. It also serves as a tool for tracking measures and tracing transformations and changes during the life of the project and beyond. Lastly, it offers solid counseling and advice to policy-makers as they strive to bring about reform in their countries and regions.

Accompanying the volume are videos on the strategic areas which can be used during training sessions and or lectures. The videos were jointly produced by Stockholm University and The American University in Cairo.

REFERENCES

Al-Hroub, A. 2014. "Quality Issues in Education Programs in the Arab Universities: A Synthesis of Case Studies." In Quality Issues in Higher Education in the Arab Countries, pp. 76–55. Beirut: The Lebanese Association for Educational Studies.

Altbach, P.G., and J. Knight. 2007. "The Internationalization of Higher Education: Motivations and Realities." Journal of Studies in international Education, 290 :(4–3)11

Darling-Hammond, L. 1997. "School Reform at the Crossroads: Confronting the Central Issues of Teaching." Educational Policy, 66–151 :(2)11.

De Wit, H. 2010. Internationalization of Higher Education in Europe and its Assessment, Trends and Issues. NVAO.

De Wit, H. 2011. "Globalization and Internationalization of Higher Education". Introduction. Universities and Knowledge Society Journal 48–241 :(2)8, http://journals.uoc.edu/index.php/rusc/article/view/v8n-2 globalizacion-e-internacionalizacion-de-la-educacion-superior

De Wit, H., International Association of Universities, IEA. 2012. "Affirming Academic Values in Internationalization of Higher Education: A Call for Action."

El Amin, A. 2014. "Quality Issues in Higher Education Institutions in the Arab Countries (A Synthesis of Case Studies)." In A. El Amin, ed., Quality Issues in Higher Education in the Arab Countries, 38–13. Beirut: The Lebanese Association for Educational Studies.

Farag, I. 2010. The Politics of Educational Reform in Egypt. In A.E. Mazawi and R.G. Sultana, eds., The World Yearbook of Education 2010: Education and the Arab 'World': Political Projects, Struggles, and Geometries of Power. New York: Routledge.

Haigh, M., and F. Ell. 2014. Consensus and Dissensus in Mentor Teachers' Judgments of Readiness to Teach. Teaching and Teacher Education, 21–40:10.

Herrara, L., and C.A. Torres, C.A. eds. 2006. Cultures of Arab Schooling: Critical Ethnographies from Egypt. New York, NY: State University of New York Press.

Hudzik, J. 2011. Executive Summary: Comprehensive Internationalization: From Concept to Action. NAFSA.

Haigh, M., F. Ell, and V. Mackisack. 2013. Judging Teacher Candidates' Readiness to Teach. Teaching and Teacher Education, 11–34:1.

Lambert, J., and A. Usher. 2013.. "The Pros and Cons of Internationalization: How Domestic Students Experience the Globalizing Campus." Higher Education Strategy Associates Intelligence Brief 7.

Mazawi, A.E. 2005. Contrasting Perspectives on Higher Education Governance in the Arab States. Higher Education: Handbook of Theory and Research, 89–20:133.

Twining, P., T. Raffaghelli, P. Albion, and D. Knezek. 2013. "Moving Education into the Digital Age: The Contribution of Teachers' Professional Development." Journal of Computer Assisted Learning, 37–29:426.

OECD/World Bank. 2014. Draft Report: Reviews on National Policies for Education: Schools for Skills—A New Learning Agenda for Egypt.

UNESCO. 2014. Teachers and Learning: Achieving Quality for All, 1st ed. EFA Global Monitoring Report. UNESCO, Paris

UNICEF and League of Arab States. 2009. Guiding Framework of Performance Standards for Arab Teachers: Policies and Programs., The League of Arab States, Cairo.

Zaalouk, M. 2013. "Globalization and Educational Reform: What Choices for Teachers." In T. Seddon and J.S. Levin, eds., Educators, Professionalism and Politics: Global Transitions, National Spaces and Professional Projects, pp. 19–201. World Yearbook of Education 2013. London and New York: Routledge.

LIST OF ACRONYMS

AR	Action Research
AUC	The American University in Cairo (project lead institution)
BSc	Bachelor of Science
CDFE	Capacity Development of Faculties of Education (the project name)
CPD	Continuing Professional Development
CV	Curriculum Vitae
EBR	Employment-Based Route
EdD	Doctor of Education
EU	European Union
FoE	Faculty of Education
HE/HEI	Higher Education/Institution
IoE	Institute of Education (part of UCL)
ITE	Initial Teacher Education
ITT	Initial Teacher Training
MENA	Middle East and North Africa region
NQT	Newly Qualified Teacher
PD	Professional Development
PGCE	Postgraduate Certificate of Education
PhD	Doctor of Philosophy
QTS	Qualified Teacher Status
SCITT	School-Centred Initial Teacher Training
STEM	Scientific, Technological, Engineering and Mathematical Subjects
SUPI	The Schools-Universities Partnership Initiative
TEMPUS	Trans European Mobility Program for University Studies (The Program Funding the Current Project)
TP	Teaching Practice (Practicum)
TPD	Teacher Professional Development
UCL	University College, London
UK	United Kingdom (England, Scotland, Wales, Northern Ireland)

SECTION I. UNIVERSITY-SCHOOL PARTNERSHIP: RESEARCH AND BEST PRACTICE

SECTION I.

UNIVERSITY-SCHOOL PARTNERSHIP: RESEARCH AND BEST PRACTICE

School in UK

Schools are the prime stage where faculties of education perform their critical acts. Enhancing and cementing partnerships between schools and universities for the attainment of joint objectives and activities will make a significant difference to the quality of teaching and learning in both institutions.

Forming effective partnerships

Effective partnerships, underpinned by contract can help to create school environments for teaching and teacher training, through Professional Development Schools, lab schools and school reform networks and other local forms of partnership. These are strong models of practice and collaboration and the environment itself serves as a learning experience for teachers. Effective partnerships are also developed where schools are committed to high-quality training programmes that go beyond initial teacher training to emphasise Continuing Professional Development; these are involved in developing Initial Teacher Education (ITE) and Continuing Professional Development (CPD) courses; and contribute to assessment decisions. On the other side they are characterized by Faculties of Education (FoEs) that commit to wider partnership activities with schools; sustain tutors' visits to schools; and promote shared observations of student teachers by university faculty staff and school staff.

Such schools can help to immerse student teachers in strong cultural norms and practices and support advances in knowledge by serving as sites where practice-based and practice-sensitive research can be carried out collaboratively by school teachers, university faculty and student teachers/researchers. This type of research is the link between 'theory' and practical action in classrooms. Lawrence Stenhouse's (183 :1983) words are extremely pertinent here:

Two parallel activities need to be pursued: instruction, which gives us access to conclusions which represent in simplified, and hence, distorted, form our best grasp of a realm of knowledge and meaning; and learning by inquiry or discovery, which enables us to understand how to utilize such a representation of knowledge, to assess its limitations and to develop the means of pushing outwards beyond these limitations.

Inquiry-focused schools engage in intensive professional learning for veteran teachers and may become hubs of professional development for their communities.

Another form of partnership which can be developed between universities and schools is to place new recruits as paid apprentices in teaching schools. These apprentices will teach and co-teach in the classrooms of expert mentor teachers for a year while they complete coursework in curriculum, teaching and learning with local partnering universities.

UNIVERSITY-SCHOOL PARTNERSHIP: EXAMPLES OF BEST PRACTICE

The concept of Professional Development Schools was developed by the Holmes Commission (1990) in the USA and provides an example of how to integrate practice of student teachers, academic studies, and research and development in schools. This concept focuses on mutual partnerships in a number of areas:

- High-quality school teachers who are entrusted with the role of a cooperating teacher or mentor during the Practicum ('teaching practice' or 'field experience') component
- Teacher educators, university faculty, and educational researchers along with student teachers, are simultaneously involved in innovative work done in schools.
- Permanent partnerships between institutions of initial teacher education, such as universities offering courses in education, and schools are established.

Roles in partnerships: Examples

School and university faculties share the responsibility for student teacher learning. In partnership, they share and integrate resources and expertise to create roles and structures that support and create opportunities for student teachers to learn. They also select and prepare members of staff to mentor and supervise student teachers.

This partnership takes accountability for the student teachers' demonstration of content, the alignment of their pedagogical and professional knowledge with set standards, and the demonstration of proficiencies in their Practicum experiences, where they are immersed in classroom life under supervision of a cooperating teacher. Student teachers are also expected to apply the skills, knowledge and professional dispositions they are exposed to during coursework in a conceptual framework, with a view to achieving a long-term positive effect on student learning. They need to demonstrate skills in working with colleagues, parents and families, and communities.

It is therefore helpful to identify the roles which faculty, cooperating teachers, and student teachers are expected to fulfil during the Practicum experience.

EFFECTIVE PARTNERSHIP: PRINCIPLES FOR PRACTICE

These include:

A common, clear vision of good teaching that permeates all coursework and Teaching Practice (TP) experiences, creating a coherent set of learning experiences;

Well-defined standards of professional practice and performance that are used to guide and evaluate coursework and clinical work;

A strong, core university curriculum, taught in the context of practice and grounded in a knowledge of child and adolescent development and learning; an understanding of social and cultural contexts; curriculum, assessment, and subject matter pedagogy;

Extended Practicum experiences – at least 30 weeks of supervised Practicum and student teaching opportunities in each programme – that are carefully chosen to support the ideas presented in simultaneous, closely interwoven university coursework;

Extensive use of case methods, teacher research, performance assessments, and portfolio evaluation that apply learning to real problems of practice;

Explicit strategies to help students confront their own deep-seated beliefs and assumptions about learning and students and to learn about the experiences of people different from themselves;

Strong relationships, common knowledge, and shared beliefs among school - and university - based faculty jointly engaged in transforming teaching, schooling, and teacher education. (Darling-Hammond, 2006)

The role of cooperating teachers

The role of cooperating teachers is crucial. Student teachers who undergo Practicum require a great deal of support, especially in respect of teaching skills and emotional support. The learning curve of a student teacher is steep, since many of the effective attitudes and methodologies are learnt through the stress of actual experience, and effective mentoring is fundamental to reducing student teacher burnout.

Cooperating teachers are among the greatest influences on student teachers during the Practicum, as they spend more time with the students in school than anyone else. They therefore often fulfil the role of mentor during the Practicum. One of the most important aspects of the teacher-mentor role is the fact that mentors are familiar with the school-learning environment and, through their teaching experience, can provide a model to be observed and emulated. The quality of mentoring is crucial. 'Just observing' is not enough and the mentor/cooperating teacher needs to have clear and informed ideas of those qualities which lead a teacher to perform successfully. This includes the use of regular feedback and target setting so that student teacher responses feed into a live developmental action plan. These ideas can be formed both from experiential learning and from a sound theoretical acumen.

Furthermore, changes in teachers' roles, classroom pedagogies and learning outcomes call for substantial changes in teacher knowledge/teaching practices, and theories about teaching and learning. Cooperating teachers need to be in step with these changes and need to be able to adopt and adapt to their classroom practices. Only thus can they impact or guide student teachers towards effective functioning within the school set-up.

If cooperating teachers rely solely on their teaching experiences and are not in touch with contemporary theories of education and of teaching, they risk taking an approach to teaching that will contrast sharply with what student teachers are exposed to during their sessions at university. Student teachers may find the emphasis in these classrooms to be on classroom management and successful student performance in end-of-year exams and on unorthodox or outdated teaching methodologies. While they may be perceived as 'successful' teachers by the school community, they may be influencing student teachers in ways that are not desirable by their student teachers' supervisors/evaluators. This is especially the case if the Practicum experience is carried out in a single type of school.

Having too many student teachers spending time in schools may be problematic for cooperating teachers, since this may not yield tangible benefits for them or their students. It can make it difficult to engage expert teachers as mentors, on a regular basis, to support student teachers in their schools.

Highly proficient and successful practitioners can guide and support others in the teaching process. However, it is essential that cooperating teachers receive the training necessary to allow them to place their valuable experiential know-how within a theoretical framework, and to develop their mentoring skills. This should be carried out in partnership with FoE staff, with whom they should design and develop effective Practicum opportunities.

The role of student teachers

The student teaching experience is considered the space where prospective teachers gain personal practical knowledge about the work of teaching. Although this experience can be considered a 'medieval apprenticeship', this model continues to be the prevalent way to prepare teachers for the profession. Student-teaching is an important occasion for teacher learning and has a profound influence on student teachers. The immersion into classroom life provides student teachers with multiple opportunities to develop new understandings of the dimensions of teaching such as pedagogy, content matter, students, and the social context of schools. The role of student teachers would be that of demonstrating that they have met standards and can demonstrate competencies within the classroom.

Schools need teachers who are responsive to the needs of students from disadvantaged backgrounds and who will be resilient enough to work in schools which are hard to staff. Thus student teachers are also expected to build field experiences in these challenging settings, to apply theories of equity and learning in creating inclusive learning environments, and to have the right dispositions to work.

Extensive time in the field for student teachers is fundamental. One cannot expect student teachers to perform satisfactorily after having been exposed to only a few weeks to the reality of schools.

Student teachers are to be encouraged to participate in all aspects of school functioning, ranging from special education and support services for students to parent meetings, home visits, and community outreach. It is also important that they attend staff meetings and projects aimed at ongoing improvement in students' opportunities to learn. In this way, they can understand the broader institutional context for teaching and learning and begin to develop the skills needed for effective participation in collegial work around school improvement throughout their careers.

The role of faculty

One of the roles of the university faculty is to be aware of new and developing research in their fields and emerging theories and practice. They are engaged in deepening their understanding of the research and practice that informs their work and constantly reassessing the rigor and value of past and current research practices and theories. They also assess the effects of their teaching on the learning of student teachers, and use their findings to strengthen their own practice.

The pedagogically and politically charged spaces that university supervisors inhabit – regardless of institutional context – require skills, adeptness, and expertise.

One of the biggest challenges for faculty is the immense effort needed to secure placements for growing numbers of student teachers in schools and ensuring that they receive a high standard of support and recognition. This tactical concentration on the practical problem of securing placements and ensuring quality supervision may divert efforts away from engaging with the strategic intellectual issues of professional experience.

It is essential that faculty be familiarized with school cultures on a regular basis and in such a way as to enable them to equip student teachers with adequate tools to launch them on their voyage into the realm of teaching. It is important that they have first-hand experience of the social and educational realities of schools and their learning environment. This will lead to better focus on the challenges which student teachers face, especially those related to interpersonal skills, classroom management and the use of effective teaching methodologies.

The role of the teacher educator has been reconceptualised and expanded. This role includes facilitation, mentoring, tutoring and counselling, in addition to teaching and instruction. This is a holistic approach to supervision, with an emphasis on relationships and support.

School in UK

QUESTIONS FOR SCHOOLS AND UNIVERSITIES TO CONSIDER

How might student teachers be best facilitated to reflect on, and gain a thorough understanding of, the relationship between content and content-specific pedagogy?

They need to deeply understand the content that they plan to teach and be able to provide multiple explanations and instructional strategies so that all students learn. In addition to this, and just as crucial, by the end of their initial training, they need to have built expertise in pedagogical content knowledge to be able to critique research and theories related to pedagogy and learning, and be able to select and develop instructional strategies and technologies that help all students learn.

To what extent does the FoE have a policy for initial teacher education that develops and models professional dispositions that are expected of educators (i.e., qualified teachers)?

These professional dispositions must form part of the course's conceptual framework and faculty needs to systematically assess the development of appropriate professional dispositions by student teachers. These dispositions can be assessed through observable behaviour in educational settings and by modelling them by university and schools personnel.

How does policy ensure that teacher educators and mentors, crucial to the quality of the teaching workforce, have effective professional development for Practicum oversight and partnership working?

Teacher educators and mentors are present at every stage of the teacher's life-cycle, teaching and guiding them; it is they who should model and exemplify, in their day-to-day teaching, what it means to be a professional learner-centred teacher; and it is they who undertake the key research that develops our understanding of teaching and learning. National policy should seek to improve the ways in which teacher educators are selected and trained. It should aim at better defining the role and the competences of quality teacher educators to raise and improve their impact on teachers' teaching.

Structures in partnerships: Recommendations

This section focuses on those partnership structures necessary for successful initial teacher education, in particular the Practicum, to lead to powerful learning experiences for the student teachers concerned.

The Practicum side of teacher education may be influenced by the idiosyncrasies of school placements. These need to be mitigated by an effective teacher-education programme that has a Teaching Practice (TP) curriculum as well as a curriculum of didactics and pedagogy. This provides for student teachers to turn analysis into action by applying what they are learning and systematically reflecting on student learning in relation to teaching. In such programmes, student teachers receive detailed feedback with opportunities to re-try and continuously improve their teaching practices.

The Practicum should be a structured field experience with activities designed to introduce student teachers to increasingly greater levels of responsibility in the roles for which they are preparing. These activities are specifically designed to help candidates attain identified knowledge, skills, and professional dispositions as set out in professional, state, and institutional standards.

POINTERS FOR POLICYMAKERS

Developing sites where state-of-the-art practice is the norm is a critical element of strong teacher education, and it can be one of the most difficult to attain. This is because if student teachers are to see and emulate high quality practice, especially in schools serving students from difficult backgrounds, then it is necessary not only to seek out individual cooperating teachers, but also to develop the quality of schools so that prospective teachers can learn productively, and to create settings where advances in knowledge and practice can occur. In this sense, Practicum and CPD must be developed in tandem.

It may be difficult for schools to cooperate with FoEs when it comes to providing student teachers from university with the best learning environment. Student teachers may be perceived by schools as having insufficient knowledge in the subject/s taught, and as a source of disruption to the smooth day-to-day running of the school. Furthermore, universities often do not have control over the number of classes and level of students assigned to the student teachers, and this cooperation is a function of the level of partnership established between the two institutions.

There is a need to ensure that all those university faculty involved in the Practicum receive education and training in methodologies of teaching, co-operation and learning appropriate for student teachers.

QUESTIONS FOR SCHOOLS AND UNIVERSITIES

Are the function of the Practicum and the form it should take to meet that function clearly considered and articulated?

If the Practicum is to address the gap between theory and practice, then the solution is a model where student teachers put theory into practice. The role of the various stakeholders is determined by this formulation of the Practicum: faculty educators teach theory; cooperating teachers oversee the translation of theory into practice by student teachers; and student teachers are expected to learn theory and then practically implement it.

The development of a broad repertoire of professional actions/action structures seems to call for a broad knowledge base as well as for coordinated and coherent practice in which (prospective) teachers may find learning situations appropriate to promote the development of competent, reflective and theory-based action. *How is practice integrated coherently into all models of teacher education?*

One pervasive discourse is that good teaching is 'caught rather than taught' and so any exposure to schools is beneficial for student teachers. *To what extent is this influencing the approach to Practicum? Does this mean that more importance is attached to the quantity than the quality of the experience?*

Is there a structural and epistemological divide between teachers and teacher educators, and an attendant attitude of some teachers to protect student teachers from the 'impractical' ideas that come from university coursework? If so, how might partnership policies overcome this by designing the function and models for the Practicum so that university-based initial teacher education does not suffer from the theory-practice divide?

How might partnerships between universities, schools and communities in the preparation of teachers be strengthened and rendered less hierarchical?

How are the differing needs of undergraduate and postgraduate student teachers reflected in models of Practicum? How are these reflected in the models of block placements?

Academic and practitioner knowledge can intermingle, through spaces like Professional Development Schools, to support student teachers in their learning. These schools can creat a genuine and innovative learning community where university and school-based teacher educators and student teachers interact to break down the divide between theory and practice.

The Practicum can be the end product of a longer period of school experience where evaluators and mentors are constantly and formatively guiding student teachers to perform better. This model will ensure that student teachers will be prepared in the best possible manner. Tight coherence and integration among courses and between coursework and Practicum in schools is needed. Student teachers can learn more effectively when the ideas they are exposed to are reinforced and connected both in theory and in practice. Creating coherence can be difficult because of departmental divides and the fragmentation of traditional undergraduate teacher education programmes. It is hence important that these programmes are carefully sequenced, based on a strong theory of learning to teach. Courses can be designed to intersect with each other and tightly interwoven with student teachers' work in schools. They also need to include applications in classrooms where observations of student teachers occur. These classrooms are selected because they model the kind of practice that is discussed in courses.

Faculty who teach courses also supervise and advise student teachers in placement schools, bringing together an integration of roles. Faculty are recruited to teacher education roles, either full time, or as part time contributors to university-based courses. It is suggested that the Practicum experience is extensive, well-supervised and linked to coursework using pedagogies that link theory and practice, allowing student teachers to learn from expert practice in schools

The most powerful programmes require students to spend extensive time in the field throughout the entire programme, examining and applying the concepts and strategies they are simultaneously learning about in their courses alongside teachers who can show them how to teach in ways that are responsive to learners. School-based work needs to incorporate newly emerging pedagogies, such as close analyses of learning and teaching, case methods, performance assessments, lesson study and Action Research. All these models link theory and practice in ways that theorise practice and make formal learning practical.

Analysing samples of student work, teachers' plans and assignments, videotapes of teachers and students in action, and cases of teaching and learning can help teachers draw connections between generalized principles and specific instances of teaching and learning.

Strong partnerships between universities and schools will produce changes in the content of schooling as well as teacher training. One cannot teach people how to teach powerfully if they are not exposed to exemplars of good practice in the classroom. The coursework, by itself, cannot counteract the powerful experiential lessons that shape what teachers actually do. Teachers need to learn in settings that typify the problems of schools and have access to carefully selected strategies designed to teach a wide range of learners.

It seems to be necessary to integrate practice coherently into all models of teacher education. Through a strong, mutually beneficial partnership with schools one can develop high quality teachers specially educated to fulfil the demanding tasks of cooperating supervisors, mentors and partners.

CASE STUDY OF EFFECTIVE PARTNERSHIP: SEE APPENDIX II

The Nottingham case study in Appendix II illustrates the very large amount of players with clearly defined roles that are there to support the student teacher. It emphasises the need for systematic networks of support, within which each contributor is accountable to the others, and most especially, to the student teacher.

Indications for policymakers

- The paradigm of university-based teacher education needs to change from one where academic knowledge is viewed as an authoritative source of knowledge about teaching, to one where there is a non-hierarchical interplay between academic, practitioner, and community expertise. One needs to consider different aspects of expertise that exist in schools and communities and which are brought into teacher education to coexist on a more equal plane with academic knowledge. When field experiences are carefully coordinated with coursework and closely mentored, teacher educators in both schools and universities are better able to accomplish their goals in preparing teachers to successfully enact complex teaching practices.

- There is a need to ensure that all those involved in supporting training teachers receive education and training in methodologies of teaching, co-operation and learning appropriate for student teachers.

- Strong partnerships between universities and schools will produce changes in the content of schooling as well as teacher training.

School in UK

BIBLIOGRAPHY

Buchberher, F., B.P. Campos, D. Callos, and J. Stephenson. 2000. Green Paper on Teacher Education in Europe: High Quality Teacher Education for High Quality Education and Training. Umeå: Thematic Network on Teacher Education in Europe.

Carr, W. 2006. "Philosophy, Methodology and Action Research". Journal of Philosophy of Education 4) 40).

Carr, W. 2009. "Practice without Theory? A Postmodern Perspective on Educational Practice". In B. Green, ed., Understanding and Researching Professional Practice. Rotterdam: Sense Publishers.

Chetcuti, D.A., and M.A. Buhagiar. 2014. "Assessing the Field Placement in Initial Teacher Education: Finding the Balance between Formative and Summative Assessment". Problems of Education in the 21st Century 52–58:39.

Darling-Hammond, L. 2006. Powerful Teacher Education: Lessons from Exemplary Programs. San Francisco: Jossey Bass.

Darling-Hammond, L. 2010. Teacher Education and the American Future. Journal of Teacher Education 47–35 :(2–1) 61.

Darling-Hammond, L., and J. Baratz-Snowden. 2005. A Good Teacher in Every Classroom: Preparing the Highly-qualified Teachers Our Children Deserve. San Francisco, CA: Jossey- Bass.

Dick, B. 2002. "Action Research: Action and Research". Paper prepared for the seminar "Doing good Action Research," held at Southern Cross University, Monday, February 2002 ,18, http://www.aral.com.au/DLitt/DLitt_P41aandr2.pdf

Earley, P., and V. Porritt, V. 2013. Evaluating the Impact of Professional Development: The Need for an Evidential Baseline. In Professional Development in Education.

Elliot, J. 1991. Action Research for Educational Change. Buckingham: Open University Press.

Furlong, C. 2013. The Teacher I Wish to Be: Exploring the Influence of Life Histories on Student Teacher Idealized Identities. European Journal of Teacher Education 83–68 :(1) 36.

Goodnough, K. 2011. Examining the Long-term Impact of Collaborative Action Research on Teacher Identity and Practice: The Perceptions of K–12 Teachers. Educational Action Research 19 86–73 :(1).

Hargreaves, A. 1994. Changing Teachers, Changing Times: Teachers' Work and Culture in the Postmodern Age. London: Continuum.

Holmarsdottir, H., Z. Desai, L.R. Botha, A. Breidlid, S. Bastien, W. Mukoma, M. Ezekiel, A. Helleve, A.I. Farag, and V. Nomlomo. 2013. COMPARE Forum: The Idea of North–South and South–South Collaboration. Compare: A Journal of Comparative and International Education 86–265 :(2) 43.

Lewin, K. 1946. "Action Research and Minority Problems". In G.W. Lewin, ed., Resolving Social Conflicts. New York: Harper & Row (1948).

Kemmis, S., and R. McTaggart. 1988. The Action Research Reader, 3rd ed. Melbourne: Deakin University Press.

Kemmis, S., and R. McTaggart. 2003. "Participatory Action Research". In N.K. Denzin and Y.S. Lincoln, eds., Handbook of Qualitative Research, 3rd ed., 604–559. Thousand Oaks, CA: Sage.

Lendahls Rosendahl, B., and K. Rönnerman. 2006. "Facilitating School Improvement: The Problematic Relationship between Researchers and Practitioners". Journal of In-service Education 4) 32).

McFarland, K., J. and Stansell. 1993. “Historical Perspectives”. In L. Patterson, C. Santa, K. Short, and K. Smith, eds., Teachers Are Researchers: Reflection and Action, 18–12. Newark, DE: International Reading Association.

McIntyre, D. 2004. “Making Sense of Research for Teaching. “Unpublished paper. SUPER Teaching and Learning Conference, June 2004, Chesterton Community College, Cambridge.

McLaughlin, C., D. McIntyre, and K. Black-Hawkins, K. 2004. Researching Teachers, Researching Schools, Researching Networks: A Review of the Literature. www.educ.cam.ac.uk/research/projects/super/ReviewOfLiterature.pdf

McNiff, J., P. Lomax, and J. Whitehead. 2003. You and Your Action Research Project, 2nd ed. London: Routledge.

McNiff, J., P. Lomax, and J. Whitehead. 2011. All You Need to Know about Action Research, 2nd ed. London: Routledge.

McNiff, J., and J. Whitehead. 2005. Action Research for Teachers: A Practical Guide, Abingdon, UK: David Fulton.

Norton, L. 2009. Action Research in Teaching and Learning. A Practical Guide to Conducting Pedagogical Research in Universities. Abingdon, UK: Routledge.

OECD. 2011. Building a High-quality Teaching Profession: Lessons from around the World. Paris: OECD.

Pollard, A. 1984. Ethnography and Social Policy for Classroom Practice. In L. Barton and S. Walker, eds., Social Crisis and Educational Research. London: Croom Helm.

Portelli, J.P., P. Solomon, S.E. Barrett, D. Mujawamariya, L.E. Pinto, and J. Singer. 2010. Stakeholders’ Perspectives on Induction for New Teachers: Critical Analysis of Teacher Testing and Mentorship. Toronto: Ontario Institute for Studies in Education.

Postholm, M. 2012. “Teachers’ Professional Development: A Theoretical Review”. Educational Research :(4) 54 29–405.

Reason, P., and H. Bradbury. 2007. Handbook of Action Research, 2nd ed. London: Sage.

Rorrison, D. 2010. “Assessment of the Practicum in Teacher Education: Advocating for the Student Teacher and Questioning the Gatekeepers”. Educational Studies 19–505 :(5) 36.

Sellwood, I and Twining, P. (2005), Action Research, Coventry: Becta

Smedley, L. 2001. “Impediments to Partnership: A Literature Review of School–University Links“. Teachers and Teaching 209–189 :(2) 7.

Southgate, E., R. Reynolds, and P. Howley. 2013. “Professional Experience as a Wicked Problem in Initial Teacher Education”. Teaching and Teacher Education 22–31:13.

Vrijnsen-de Corte, M., P. den Brok, M. Kamp, and T. and Bergen. 2013. “Teacher Research in Dutch Professional Development Schools: Perceptions of the Actual and Preferred Situation in Terms of the Context, Process and Outcomes of Research“. European Journal of Teacher Education 23–3 :(1) 36.

White, E. 2013. “Exploring the Professional Development Needs of New Teacher Educators Situated Solely in School: Pedagogical Knowledge and professional identity. Professional Development in Education :(1) 39 98–82.

Zaalouk, M. 2013. “Globalization and Educational Reform”. In T. Seddon and J.S. Levi. eds., World Yearbook of Education 2013. Educators, Professionalism and Politics: Global Transitions, National Spaces, and Professional Projects, 19–201. London: Routledge.

Zailani, J. “Teaching Practicum: Student Teachers’ Perspectives”. In Proceedings of the 3rd International Conference on Foreign Language Learning and Teaching, 16–15 March, 2013, Bangkok, Thailand. http://litu.tu.ac.th/2012/index.php/fllt-conferences/-521fllt-2013-conference-proceedings

SECTION II. PRACTICUM: RESEARCH AND BEST PRACTICE

SECTION II.

PRACTICUM: RESEARCH AND BEST PRACTICE

Never Give Up

from thenedshow.com

©K-3TeacherResources.com

Encourage Others

from thenedshow.com

©K-3TeacherResources.com

School in Malta

Defining Practicum

One of the most pervasive pedagogies in teacher education is that of supervised student teaching, known variously as 'Practicum', 'clinical training experience', 'field experience' or 'teaching practice'. This is a phase in a prospective teacher's life which has long been acknowledged as having a profound impact on teachers' learning (Darling-Hammond and Baratz-Snowden, 2005). The immersion in classroom life provides prospective teachers with multiple opportunities to develop new understandings of the dimensions of teaching. The experience is heavily influenced by the supervisors' role and obligations and the resulting interactions between the supervisor and the student teacher concerned. For ease of reference, we will refer to this phase as the 'Practicum'.

The Practicum is often described by various teacher preparation programmes as a formative field experience where student teachers can, through trial and error, embark on a lifelong career of reflection and insight that will eventually make them into good teachers. This usually signifies an emphasis on student growth and development over 'final judgement'. In such a scenario, it is believed that the development of the student teacher capable of reflective practice and a diagnostic evaluation of her/his strengths and weaknesses as a practitioner will be of more long-term benefit than assessment based on a grade like 'Pass' or 'Fail'. Very often it is a time of survival, a period of getting through, wherein student teachers face a number of challenges (Portelli et al., 2010). The way student teachers perceive this phase of teacher preparation may also be linked to how they eventually behave, as teachers, in class, and thus merits further research and discussion. As Hargreaves (1994) argues, teachers have a deep sense of what is practical – they are concerned with what works and what doesn't; their needs and demands are influenced by what is valid, relevant and practical. This has implications for the input of the Practicum phase, and the teacher preparation programme in general (Hargreaves, 1994).

Zeichner (1993) identifies four key traditions of pre-service teacher education and training courses:

- The developmentalist tradition – the assumption that the natural order of the development of the learner provides the basis for determining what should be taught to teachers. This natural order of teachers' development is determined by research involving the careful observation and description of trainee teachers' behaviour at various stages of training.

- The social efficiency tradition – a faith in the power of science to provide the basis for building a teacher-education curriculum. This is considered by many as part of a strategy to strengthen the educationists' claim to legitimacy within the university.

- The academic tradition – a sound liberal arts education, complemented by an apprenticeship experience in a school, is the most sensible way to prepare teachers for their work.

- The social reconstructionist tradition – both schooling and teacher education are crucial elements in a movement toward a more just society (Zeichner, 1993).

There are a number of contradictory demands concerning teacher education – legislative mandates for curriculum coverage; restrictive university regulations; professional standards that are in danger of being ignored because of extreme teacher shortages – and these demands may lead to a teaching workforce that lacks the necessary competences for dealing with the demands of the profession (Ben-Peretz, 2001).

Despite these challenges, however, there is also substantial and growing evidence that teacher education matters for teacher effectiveness (Evertson, Hawley, et al., 1985; Ashton and Crocker, 1986; Wilson, Floden, et al., 2001). The notion of effectiveness, however, can also be tied to a neo-liberal perspective which suggests that a teacher's worth is to be measured by her or his ability to deliver good student results. Underlying this doctrine is the conviction that raising educational standards for all is a question of effective school management and quality teaching, while the issues of the different social, economic and cultural capital that students bring with them to the school and the learning context are ignored. Appeals to standards justify the intensification of teacher testing, leading to increased control over schools on the part of the state and education authorities (Sultana, 2005).

Partnership in the Practicum Experience: Examples of Best Practice

The Practicum provides a context for student teachers to begin to integrate research findings from rigorous educational research with practice. Ideally, it should be an opportunity for teacher-educators and experienced school teachers to partner with each other in supporting and supervising student teachers. In reality, institutions trying to implement this find it quite challenging and the supervision which exists does not always involve university staff or school-based mentors helping students make connections between research and practice.

Overcoming the theory-practice divide

There may be a lack of connection between campus courses and school-based experiences. In some instances, cooperating teachers in schools, with whom students work during their Practicum, may know very little about the specifics of the methods and courses that their student teachers have completed on campus, and the people teaching the campus courses may know very little about the classrooms where their students are placed. In other models these barriers are being reduced and partnership has a key role to play here. No amount of coursework, can, by itself, counteract the powerful experiential lessons that shape what teachers actually do. In David Carr's famous words:

… education is primarily a 'practical' rather than a 'theoretical' or 'technical' activity, involving a constant flow of problematic situations which require teachers to make practical judgements about what to do in order to translate their general educational values (such as 'the development of understanding', or 'the realisation of individual potential') into practice (Carr, 60 :2009).

Student teachers may describe university work as 'too theoretical', that is, too abstract and general and bereft of specific tools to use in the classroom. However, 'theory' and 'abstraction' and 'generalisation' are vital in allowing a teacher to make her/his own decisions about teaching behaviours, based on the most rigorous research which underpins all 'theory'. In addition, what might seem 'divorced' from immediate practice may become very useful knowledge and understanding later in a career.

In some contexts, initial teacher education programmes are moving, or have moved, towards a model which is based less on academic preparation, and more on preparing professionals in school settings, with a good balance between research and practice. These programmes enable teachers to get into classrooms earlier, spend more time there and get more support in the process. Designated schools, associated with universities or teacher education institutions, give opportunities for teachers to develop and pilot innovative practices and undertake research on learning and teaching. However, where the balance tilts away from the university in favour of the school, trainee teachers may lack awareness of the research and principles underlying their practices, thus inhibiting their ability to innovate and develop.

QUESTIONS FOR POLICYMAKERS

Is it practical to expect to prepare teachers for schools, if teachers are constrained to learn purely in school settings where they experience examples of idiosyncratic, usually atheoretical practice?

How are student teachers provided with detailed feedback, with opportunities to retry and continue to improve?

How can student teachers be provided with opportunities to spend sufficient extended periods of time in the field throughout the entire programme of initial teacher education (ITE), examining and applying the concepts and strategies they are simultaneously learning about in their course?

How can explicit connections be made between academic and practitioner knowledge, in support of student teachers' learning?

The tension between academic and practical orientations of teacher education is often experienced by the staff of teacher education institutions, and by student teachers (Elstad, 2010). This tension is one of the challenges most reported by the various partner institutions in the current TEMPUS project. This often results in serious concerns about combinations of university-based and school-based learning (Elstad, 2010). The theory-practice gap is accentuated by the view that the expertise of teaching practice resides largely with teachers, and this can diminish the rich possibilities that can be made available at the university site (Loughran, 2001). Practice is often defined by what we do rather than who we are or how we think. Student teachers may have a view of practice that focuses on techniques or skills. A wider definition of practice incorporates both intellectual and technical activities. Practice involves the orchestration of understanding, skill, relationship and identity to accomplish particular activities with others in specific environments (Grossman, Compton et al., 2009). In tandem, it demands from teachers a knowledge of relevant and rigorous educational research. In reality, in many contexts, faculty staff are often engaged in teaching in schools while school teachers are engaged in formal research-based activities like Action Research, and university-based and school-based learning are not so detached from each other.

One other reason for this theory-practice gap may be that in universities there is ambivalence about the status and content of the more practical coursework that is part of most professional programmes, including that of teacher preparation (Grossman, Compton et al., 2009). Not enough is known by lay people and teachers in schools about the preparation for professional practice that occurs in the university context, especially in terms of how these courses are taught.

There is also the problem of enactment. This may be attributed to the fact that pre-service teachers have prior knowledge and experience of concepts (like cooperative learning, assessment or diversity), and this may interfere with or contradict what they learn in their teacher preparation programme. Student teachers bring their own frames of reference to teacher education and these may be incompatible with the approaches they are learning about in their course. Furthermore, such concepts can be associated with a range of behaviours, and beginning teachers may enact certain ideals about practice differently from how their teacher preparation programme intends. This may be especially true if they have no chance to engage in a strong field experience where critical concepts are modelled in practice and deconstructed for further study and understanding (Darling-Hammond, 2006).

Indeed, it is argued that separating theory from practice may create a false dichotomy, since in teaching, principles are embedded in and inseparable from practice (Schön, 1983). The conception of theory and practice that student teachers tend to have relies on a narrow, traditional conception of either. They believe that there is a rigid dichotomy between theory and practice, that there ought to be a one-to-one correspondence between theory and practice, in which theory stipulates what practitioners should

do. Theory is not always viewed as a means to question and enrich practice; sometimes student teachers expect theory to solve problems of practice rather than to offer ways of thinking about practice, based on previous educational research (Portelli et al., 2010).

To address these issues, student teachers can be given observation tasks, or other exercises or learning assignments during theory-based courses with an obligation to applying theoretical ideas and concepts to practical situations. These activities can be supported with regular feedback by their academic supervisors.

Other opportunities for learning are embedded in the activities in which novices engage. Besides learning by doing, there can be opportunities to learn through careful coaching by more experienced school-based teaching peers who are regarded as qualified mentors due to their expertise (Grossman, Compton et al., 2009). Student teachers can also be helped in developing new ways of thinking that are characteristic of professional reasoning, engage in professional conversations, and begin to construct a professional identity (Shulman, 1998).

When teacher preparation programmes have close relationships with a number of schools and the practices of these schools are closely compatible with the philosophies of the teacher preparation programmes, prospective teachers can access strong and widely shared cultural norms and practices (Darling-Hammond, 2006). Universities can develop special formal relationships with a small number of schools that work closely with them on the vision of teacher training, as well as on school reform and research. Such schools are an evolution of the concept of the laboratory school, created by many education schools in the UK and USA earlier last century. Professional development schools are similar contexts where a number of universities conduct their teacher preparation and training. This concept, however, depends on the geographical dimensions of each context. In small countries, the pool of schools which can be utilised for the Practicum tends to be limited, and universities usually collaborate with all schools to ensure that spaces for the Practicum are guaranteed for all student teachers.

When they are well implemented, professional development/laboratory schools can improve profession-wide practice through research, development and training. Studies of highly developed professional development schools have found that:

- Prospective teachers feel more knowledgeable and prepared to teach;
- Veteran teachers working in these schools report improvements in curriculum and teaching;
- There are gains in areas of student achievement directly tied to interventions the schools have undertaken with their university partners.

(Darling-Hammond and Baratz-Snowden, 2005)

PARTNERSHIPS IN PRACTICUM: EXAMPLES OF BEST PRACTICE

American University of Beirut, Lebanon

In order to strengthen the links between the university and the hosting school, the representatives of each school set up a meeting with the student teachers to discuss the school mission, the student teachers' responsibilities, and the school's expectations. They also relay any necessary information to make the Practicum experience effective for all concerned. The representatives of hosting schools provide placement in appropriate content areas and schedule meetings with appropriate mentors.

Relationships between universities and schools are also maintained through university-supported school- and classroom-based projects, professional development offered to school staff by university faculty, as well as links built over time that foster an intellectually rich environment for teacher learning. In these relationships, school- and university-based personnel co-plan the programme, and school-based teachers work as co-instructors of university courses. School and university faculty and administrators are involved in school reform and work together, with the goal being the mutual renewal of the school and the university (Darling-Hammond, 2006).

PARTNERSHIPS IN PRACTICUM: EXAMPLES OF BEST PRACTICE

Assuit University, Egypt

One of the challenges which this faculty is trying to address is the absence of a partnership between the university faculty and the Ministry of Education Department. The development of a committee comprising members of both Assuit University's Faculty of Education and the Department of Education at the ministry has been suggested, and the tasks of this committee would involve both parties in: facilitating the consideration and application of research results and studies in schools; and assuring the effectiveness of the training courses received by teachers within the college.

Institute of Education, London, UK

The institute's Employment Based Routes to attaining Qualified Teacher Status – including the 'School Direct' route – enable candidates to apply directly to a school or schools of their choice for a place on a training course, with the expectation of employment there once they finish. There are two strands of School Direct training routes: one is funded through tuition fees, as with current Post-Graduate Certificates of Education, and may ultimately lead to that qualification or similar award; the other is an employment-based, salaried route. The Institute of Education is working with a number of its partner schools in London on School Direct training. This route into teacher training enables students to apply to more than one school; it allows the Institute to work with schools that have an outstanding track record in teacher education; and provides the same financial support as other postgraduate teacher training routes.

Supervisor/Mentor Selection

It is not always easy to find schools that can offer the ideal setting for teacher learning. Universities can help to develop high quality teaching in the schools where they place their student teachers. This is because it is important that placements are carefully selected to offer settings where particular kinds of practices can be observed and learned about, through work with expert teachers and with students having particular characteristics in a range of community and school types (like those with special educational needs, those originating from diverse backgrounds, and those of different abilities). Cooperating teachers will be selected on the basis of their expertise and willingness to share it systematically with an entering trainee colleague. It would help if the teacher has at least three years of teaching experience; has the capacity to positively impact student learning; can model good practices and make her/his thinking visible; and is able to mentor student teachers and work cooperatively.

It is sometimes proposed that it is helpful for student teachers to be placed with graduates from the same teacher preparation course to ensure that these teachers have learned a sophisticated practice and a way of thinking about teaching that are compatible with the programme's university-based work. This enhances the coherence of the learning experience for novices and forges more powerful connections between the theoretical and the practical in both the university and the school. Rather than a traditional divide wherein the university owns the theory and the

school owns the practice, there is a more integrated set of experiences in which the school mentors rely on and impart theoretical understandings of practice while university instructors help develop practices that are theoretically rich but also practical (Darling-Hammond, 2006). On the other hand, when student teachers are placed with cooperating teachers who have received a different preparation or embrace different beliefs of how to be an effective teacher, this may be a good opportunity for student teachers to reflect on and challenge their own assumptions.

Peers and colleagues who are of the same age group and teach the same subject/s and/or same students may make more successful mentors and be more likely to win the confidence of the teacher being evaluated than those who are more superior in the school hierarchy. The teachers may more easily engage with less superior colleagues in self-reflection about their practices and express their feelings and concerns during interviews without fearing potential sanctions. Peers can also provide qualitative feedback based on their own experience (Goldstein, 2009).

PARTNERSHIPS IN PRACTICUM: EXAMPLES OF BEST PRACTICE

University of Leicester, UK

Student teachers work alongside the class teacher/mentor, initially formally observing specific aspects or skills such as classroom management, behaviour management or putting concepts into practice, before beginning to plan parts of lessons together, with the mentor's support.

Alexandria University, Egypt

Since there is no clear protocol to guide cooperation between any student teacher and the class teacher, the cooperation tends to be unsatisfactory. A proposed plan is to identify a number of valid and reliable criteria to guide the selection process of cooperative teachers in each school who agree to be in direct contact with the student teacher during the Practicum.

Partners in the Practicum Experience

In every Practicum experience, a number of different partners are usually involved: the faculty at university, the Ministry of Education, the schools, the collaborating teachers and the supervisors and/or mentors. In some countries, the education authorities play a direct role in implementing and monitoring supervision procedures. This might include designing specific appraisal tools and instruments. In other countries, they may simply establish general principles and guidelines and grant universities or schools considerable autonomy in adapting the student teachers' supervision model to their particular circumstances (OECD, 2013).

The Student Teachers

During the Practicum experience, student teachers are formally prepared in how to teach. Portelli et al. enlist a number of proficiencies that they should learn:

- instructional skills, strategies and approaches;
- motivation and communication;
- dealing with diversity and students with special needs, parents and community;
- reflections on teaching

Portelli et al., 2010.

PARTNERSHIPS IN PRACTICUM: EXAMPLES OF BEST PRACTICE

Institute of Education, London, UK

Wherever possible, student teachers are clustered in groups of at least two (including first- and second-year participants) so as to provide another level of support for the participants, and to increase the collective impact they can have in a school.

Saint Joseph University, Beirut, Lebanon

Student teachers experience 'peer tutoring' during their Practicum, where students ending their academic path supervise students who are starting it. There are two different modes of peer tutoring: a 'Welcome Tutoring', which consists in welcoming newly registered students at the faculty in order to introduce them to the campus and to the operation of different programmes. This practice helps new students integrate into university life and meet other students. There is also 'Support Tutoring or Coaching' which consists of individual supervision given to students who seek it. This practice allows for pedagogical support on the documentation and research levels as well as discussions and debate on current educational topics.

The Supervisors and/or Mentors

The role of the supervisor is to observe, interpret and judge the practice of a student teacher. S/he needs to translate interpretations of practice and turn them into formative feedback. Supervisors can transmit effective instructional techniques (National Council of Teaching Quality, 2011), yet, their work is coloured by ambiguity: supervision is of a seemingly perfunctory nature and the feedback which is supposed to facilitate the 'learning to teach' process may be superficial and focused on those competencies which student teachers lack, rather than on how student teachers can develop more effective practices. There are also power dynamics and complexities involved.

The role of the supervisor largely depends on the context. Not all supervisors can contribute, or are invited to participate in discussions to better understand, assess and improve the field-based component of teacher education.

Supervisors can be selected from a variety of sources:

- Teacher education institutions
- Central or state education authorities or governments
- External inspectorates
- School leadership
- More experienced teacher networks

The profile of the supervisor can largely influence the input s/he provides. When the Practicum takes place in a university's professional development school setting, veteran teachers work closely with university faculty on the development of the school's practice and the teacher education curriculum.

An Najah National University, Palestine

In their final year, student teachers must stay in the school for four months to undertake partial teaching and then full teaching under the supervision of a school teacher and an instructor from the college of educational sciences.

Institute of Education, London, UK

During the 'Teach First' programme, a suitably qualified school-based teacher mentor is appointed in each school to support the student teacher: and each mentor has a reduced timetable, particularly during the first half-term, to allow them to implement an in-school plan to provide support to the trainee teacher through weekly meetings and observations at least twice per term, and through the opportunity for participants to observe experienced teachers on a regular basis.

Stockholm University, Sweden

During each period of Practicum the student has access to a supervisor. The supervisor is responsible for helping the students with how to teach and deal with other issues related to the everyday life of schools. The supervisor should be a teacher with a teacher education that corresponds to the teacher education programme the student is following. Supervisors are also expected to participate in a course that corresponds to five weeks of full-time participation, to obtain knowledge about how teacher education is organised, the role of Practicum within teacher education, and the role of the supervisor.

Assessment in the Practicum Experience

QUESTIONS FOR POLICYMAKERS

Which skills are student teachers developing and how can these skills be assessed in an efficient and developmental manner?

Who are the teacher assessors taking part in this exercise and what skills do they in turn hold to carry out this assessment?

Are assessment results being used to inform policy development and for the improvement of teaching practices?

"A focus on their progress rather than the attainment of arbitrary or context-dependent outcomes might provide a better lens for the assessment of student teachers. Who is to say that they might not find their niche in a school or setting quite different from the one they have 'chanced' to have been placed in for their Practicum?" (Rorrison, 508 :2010).

The Criteria for Assessment

Institutions offer varying degrees of guidelines to student teachers. We believe that student teachers benefit most when they receive written expectations, laid out explicitly, for competencies on which they will be evaluated. They need to know what is expected from them in order to be recognised as 'good' teachers. This requires complete transparency in the supervision criteria and procedures, but also that student teachers are provided with support and coaching (OECD, 2013). These criteria need to be clearly communicated to student teachers, classroom teachers (where relevant), and supervisors. As well as assessing teachers' techniques, desirable competences such as teamwork abilities, the social and interpersonal skills necessary for teaching, an awareness of diversity issues, and organizational and leadership skills need also to be developed and assessed.

An assessment that measures actual teaching skill would significantly enhance the quality of teacher preparation by informing student teachers, programmes and assessors about the necessary competencies. Such an assessment requires student teachers to document their plans and teaching for a unit of instruction, videotape and critique their own lessons, and collect and evaluate evidence of their pupils' learning. These portfolios can be scored reliably and help to develop effectiveness at the same time, both for the student teachers and for those involved in mentoring and assessing these performances.

Assessment models used

Assessment processes vary across levels within a particular programme, and between different programmes. For a number of universities, there are guidebooks or portfolios which are being used as tools for assessing, together with other practices like Action Research, reflective journals, weekly meetings and peer conferencing. Some universities also provide rubrics to conduct observations and subsequent conferences. It is often recommended that the Practicum includes a cumulative and culminating portfolio that explicitly documents the student teacher's gains in respect of the performance expectations that were communicated to him or her at the outset of the experience. However, one needs to prevent portfolios with measurable outcomes to be translated into a competency-based approach. Such an approach is critiqued as promoting a fragmented view of teaching and is not helpful in supporting development. Portfolios which act as reflective tools would serve their purpose more effectively. Moreover, successful assessment practices often include the participation of multiple assessors who are judging teacher quality and performance, according to agreed criteria in which all have been trained.

An apprenticeship model, for example, can be developed in a school-learning community where the expert teacher shows the apprentice-teacher how to do a task; the apprentice observes before starting to practise the skills involved; and then gradually takes more responsibility for his or her own learning. Given the dynamics involved within such a community, and the elements of trust and support being built, student teachers can feel safe enough to show vulnerability and can become active participants in the assessment process. It is important to ensure that teacher evaluators are trained to be humane and supportive, rather than working within a discourse of failure through unrealistic expectations.

ASSESSMENT OF THE PRACTICUM: EXAMPLES OF BEST PRACTICE

University of Leicester, UK

In the Leicester Partnership, school mentors play a central part in assessing student teachers against a set of standards identified by central government as the requirements for recommendation to Qualified Teacher Status. In two equal-length practicums, the school mentors make judgements about the level (equivalent to Outstanding, Good, Satisfactory, Not Yet Achieved) awarded to each student teacher against three 'families' of Standards (Professional Values; Professional and Personal Conduct; and Teaching). In the first Practicum such judgements are formative, while in the second, they are summative. Judgements are made on the basis of a portfolio of evidence that includes written commentary about observations of lessons, with advice for future performance, and with Individual Action Plans at key points in the Practicum that review progress made and chart out future targets.

Mentors are provided with guidelines for observing student teachers' lessons, for providing constructive feedback, and ensuring that progress is continually made. Formal observations are carried out at least once a week, but more often on an informal basis, depending upon the time a co-tutor has available. All formal observations are recorded on Evidence Record Forms, on which targets for development are identified and strategies for achieving these targets suggested. In addition, there is a weekly meeting between mentor and beginning teachers of an hour's duration, during which progress is reviewed and areas for further action identified.

The role of the university tutor is to monitor and standardise these judgements so that individual student teachers are given a fair assessment regardless of specific placement. To this end, university tutors and school mentors carry out at least one joint observation of the student teacher's teaching per Practicum, in which the school mentor takes the lead in feeding back and setting targets in conjunction with the student teacher during a debrief. The university tutor observes the lesson and the feedback session and subsequently engages in discussions with the school mentor about the level at which the student teacher is performing and they agree on targets that the student teacher needs to reach in order to attain the next level in each of the three families of standards, which are then agreed with the student teacher.

The discussions between university tutor and school mentor are also seen as part of the training dimension of the Partnership. In both practicums, the university tutor may moderate the judgements of the school mentor, with their agreement. Such moderation may typically occur because of a mis-match between the language of the report on the performance of the student teacher and the expected level called, or to bring the level in line with other judgements in other placements. Between the first and second placement, levels may fall as well as rise (though mostly rise), depending upon the context of the placement. Where disagreement occurs, then an independent observation of the teaching can be carried out.

University of Malta

Student teachers are provided with Record Sheets and Evaluation Booklets which clearly set out the criteria on which they will be evaluated, and after each visit the examiners use the Evaluation Booklet to provide students with feedback. They also have a short debriefing session with the student at the end of the lesson, and in many cases a longer one half way through the teaching practice period – individually or in groups. To further support student teachers during Practicum, a number of subject-area specialists have developed specific study units for Practicum that incorporate weekly tutorial sessions after school hours that help students develop into a community of reflective practitioners.

During their teaching practice period, student teachers in the Primary Track are visited a minimum of four times in their fourth year by two examiners, with an additional visit by a third examiner (for a third opinion) when this is warranted.

Those students in the Secondary Track have a minimum of three visits during their third year and a minimum of four visits during their fourth year. Teaching practice sessions are assessed on a Pass or Fail basis. At the end of every teaching practice session, a meeting of the Board of Examiners is held wherein the progress of all students is discussed, including those who may be at risk of not meeting the standards set by the faculty. Those students who are deemed as not reaching the identified standards for the award of their degree have the right to undertake a further teaching practice, or, in certain cases, they are counselled out of the teaching profession.

Stockholm University, Sweden

In order to assess their progress, the students are required to do a self-evaluation. The supervisor is also required to carry out an evaluation of the students. The students, the supervisor and a lecturer from the university responsible for contacts with supervisors in a certain geographical area meet at the end of the Practicum during the later portion of the teacher education course to discuss the evaluation of the students. The lecturer has the final responsibility to grade the student. This grading must be based on observations made by the lecturers during visits to lessons given by the students. The evaluation of the student made by the student and the supervisor can support the lecturer in the grading.

School in Stockholm

How teachers learn to become effective teachers

It is important to understand student teachers' processes in learning to teach and in responding appropriately to their expectations about their own teaching ability, and the behaviours that are possible and probable in their practice (Loughran, 2001).

QUESTIONS FOR POLICYMAKERS

What research is there to illustrate the assumptions that trainee teachers are bringing to their training?

What research is there to demonstrate their beliefs and attitudes about innovative teaching approaches?

What research is there to show what helps them most in developing their knowledge and practice?

What defines 'good' university teaching where training effective teachers is concerned?

In this section we highlight a number of pedagogies which are identified in international literature as being effective in interpreting the ways teachers learn how to teach, and in organising the learning of teachers. Practice is embedded in a range of conflicting demands associated with teaching, learning, student teachers' concerns and expectations about practice. Interpretive research in teacher education helps to give more visibility to the sociocultural context of the student teaching experience and such studies can highlight the influence of the situated realities of student teachers in learning to teach, and can help supervisors make sense of the observed phenomena (Cuenca, 2012).

The student teacher is a learner who is actively constructing views of teaching and learning based on personal experiences and is strongly shaped by perceptions held before entering the teacher preparation programme. Students come to any learning situation with knowledge about learning, as well as prior knowledge in the content area, beliefs, abilities, motivations and personality traits. These personal characteristics interact with the learning environment to produce a context-specific motivation to engage in a particular learning experience (Brownlee, Purdee et al., 2003). The beliefs which student teachers tend to bring to their classrooms hold unexamined assumptions that need to be made explicit and challenged. If these beliefs are not addressed, prospective teachers may never learn to incorporate new knowledge or develop needed skills.

Learning to teach requires new teachers to understand teaching in ways which are different from their own experience as students. The 'apprenticeship of observation' (Lortie, 1975) refers to the learning which takes place by virtue of trainee teachers being pupils for a number of years in traditional classroom settings. This prior experience of schools and teaching can be an important source of motivation for teachers, yet as an 'apprenticeship' it has important limitations:

- students do not watch 'behind the scenes' of teachers' performance;
- they are not aware of teachers' private intentions and personal reflections of classroom events;
- they cannot place the teachers' actions in a pedagogically oriented framework (Lortie, 1975).

The limited vantage point of the student's 'apprenticeship' of their own schooling, results in a tendency to imitate superficial aspects of teaching. It is difficult for a student to get a deep understanding of the complexity which teaching involves. 'Good teaching', or what the students and the school may deem as effective and valid teaching, reinforces the view that teaching is effortless, because the knowledge and experience supporting it are invisible to those taught. Therefore, individuals often enter teaching assuming that they know how to teach and with a conception of learning as a mechanistic transmission of information. Such preconceptions make it difficult to prepare teachers to teach in ways that are compatible with what we now know about how people learn (Darling-Hammond, 2006).

A Larger Concept of 'Teacher Knowledge' and How to Support its Development

Teacher knowledge matters, and a commitment to practice is based on what is known by the profession as a whole, rather than only one's own personal experience: this is linked to the concept of evidence-based practice which requires of professionals that they be aware of the current knowledge base in their field. Through strong professional education including a study of extant research findings, plus carefully construed standards of practice, knowledge about effective learning and teaching can be accessed by all practitioners.

Carefully construed standards help to create the focus for the professional conversations about practice. Teaching standards or 'protocols of practice' depersonalize the process, creating an evaluation that focuses on the practice rather than the person (Goldstein, 2009). Strong supervision systems include established standards for performance, rubrics, and supervisors' training for reliability (Goldstein, 2009); although one needs to be also cautious of over-relying on such standards of reliability at the expense of missing features of practice which may not be linked to any protocol or rubric, yet nonetheless crucial to consider because of their value.

According to Bransford, Darling-Hammond et al. (2005), there are three general areas of knowledge, skills and dispositions that are important for any teacher to acquire:

- Knowledge of learners and how they learn and develop within social contexts
- Conceptions of curriculum content and goals: an understanding of the subject matter and skills to be taught in light of the social purposes of education, and
- An understanding of teaching in light of the content and learners to be taught, as informed by assessment and supported by classroom environments (Bransford, Darling-Hammond et al., 2005).

It is recommended that field experiences and coursework at the university occur simultaneously throughout the years of study, overlapping and reinforcing one another and facilitating the steady transfer of research to practice and practice to research. A growing body of research suggests that teachers-in-training who participate in fieldwork either before or alongside coursework are better able to understand academic research, apply concepts they are learning in their coursework, and support student learning (Darling-Hammond, 2006). When teachers study and reflect on their work and connect it to research and theory, they are better able to identify areas needing improvement, consider alternative strategies for the future, and solve problems of practice.

Pedagogies which facilitate trainee teachers' learning include: case methods, close analyses of learning and teaching, performance assessments, and portfolios.

Approximations of practice (like case methods, micro-teaching and portfolios) can never replace the need of students to engage in real settings of practice. Yet, they can prepare student teachers better for the real challenges of practice and help them develop ways of interpreting and understanding professional practice (Grossman, Compton et al., 2009). Decomposing practice is useful for developing a professional vision – for learning to see and name the parts of practice. It also allows student teachers to begin to enact practice, to practise a relatively narrow skill in a safe space. If the feedback which student teachers receive is focused, they can improve on the targeted skill while also gaining practice (Grossman, Compton et

al., 2009). Providing helpful and supportive feedback is crucial for student teachers to improve on their practice, so it is important to ensure that supervisors and cooperating teachers are enabled to develop this important skill (Buhagiar, 2013).

One pedagogy which supports this notion is that of microteaching. In addition to clinical assignments and experiences, microteaching examples (even of the student teachers themselves during the Practicum phase) can create strong models of practice in the school environment, serving as learning experiences in and of themselves. Videotape and multimedia tools are used for close study of the work of expert teachers. Such efforts to document teaching have the possibility of producing rich materials which can be accessed by teacher-educators for joint viewing, reviewing, and analysis by students. In using evidence of performance, analyses of learning can focus on numerous issues that arise in the teaching and learning process, from challenges of student engagement, student understanding, and assessment, to questions about how to frame the subject matter curriculum. Research suggests that when groups of teachers repeatedly analyse these kinds of processes, their analysis and conversation gradually shifts from a focus on the teacher and what she is doing, to a focus on student thinking and learning and how to support it (Darling-Hammond and Baratz-Snowden, 2005). This practice may also help to give rise to a community of practitioners among the student teachers themselves.

There are at least three advantages in analysing teaching artefacts in this way:

- It provides an opportunity for new teachers to think about the complexity of the classroom, by studying the work of expert veterans who have shared their practice and their reasoning, as well as evidence of their students' achievement.
- It can help new teachers and teacher-educators develop a shared understanding and common language about teaching.
- It allows new teachers time for reflection and review while still using the real materials of practice (Darling-Hammond and Baratz-Snowden, 2005).

HOW TEACHERS LEARN TO BECOME EFFECTIVE TEACHERS: EXAMPLES OF BEST PRACTICE

Saint Joseph University, Beirut, Lebanon

A Practicum Seminar is organised which gathers all new student teachers together. This seminar takes place fortnightly and focuses on a reflection on Practicum, sharing practices and experiences, and resolving difficulties of the profession with which students are confronted. Educational documents, audio-visual material and course simulations are used to better target observations and better reflect on the professional practice of each student.

University of Malta

The notion of reflective practice is strongly promoted by the faculty. Students record the progress of the development in their Professional Development Portfolios which are intended to strengthen the link between research and practice. These portfolios have evolved over the years into a cumulative document which includes examples of work students produce as part of their teaching degree, both at university and during their school placements. These journals show achievements and reflections on challenges that had to be faced, and include the students' critical evaluation of their own practice, their strengths and weaknesses, as well as reports from examiners.

One of the most significant learning supports which many institutions acknowledge is the development of materials that help to support the Practicum programme. Practicum guides provide essential information and guidelines for student teachers and the supervising team. Some of these guides also contain a number of tools that student teachers can use for their own self-assessment. The evaluation reports which student teachers receive from their supervisors are also valuable for recording the various stages of their Practicum and enable them to review their learning outcomes.

To support their learning, beginning teachers can also be assigned qualified mentors who are regularly available to coach and model good instruction. As with supervisors for the Practicum, mentors are to be screened carefully and meet designated criteria; they must be given training in mentoring and have reduced teaching loads to allow them to go into novice teachers' classrooms on a regular basis. Student teachers should also have reduced teaching loads to allow them time to: hone their professional skills through observing other teachers teach; plan and collaborate with colleagues; work with their mentors; and reflect on their own teaching.

The idea of teachers as researchers and as self-reflective practitioners who can examine their own practice critically and systematically is often included in teacher education discourse. As Malinen, Vaisanen et al. maintain, teachers should internalise a research-oriented attitude towards their work – by taking an analytical and open-minded approach; by drawing conclusions based on observations and experiences; and by developing teaching and learning environments in a systematic way (Malinen, Vaisanen et al., 2012). The courses student teachers engage in can also equip them with the capability to read pedagogical research critically. The Practicum experience needs to be integrated with theoretical pedagogy and multidisciplinary subject studies, and start as early as possible (Malinen, Vaisanen et al., 2012). The Practicum is an essential component in the training of future teachers, giving meaning to the other teaching components on which it is based. It is not merely the application of theoretical concepts and strategies, but also allows future teachers the opportunity to undertake research into the activity and reflect on their experience, merging and integrating theory and practice in an activity that reflects professionalism. As many of the partner institutions in our TEMPUS project propose, more effective communication systems between faculty and schools, and between faculty and students, can facilitate this integration.

To produce a teacher preparation programme which is inspired by conceptions of 'good teaching', the educational community must define 'good' teaching. According to Portelli et al., good teaching tends to be equated with personal characteristics, charismatic subjects and competent craftspeople rather than training, knowledge, reflection, etc. This vision provides a narrow conception that calls for greater professional and critical discussion and reflection (Portelli et al., 2010). However, when conceptions of good teaching emphasise personal qualities like empathy and caring, it is implied that some individuals, despite education, training and life experience, will never be able to achieve the status of good teachers. This set of beliefs undermines the project of teacher education and induction. In addition, this discursive model can lead to judgmental appraisals of teachers with little or no criteria for making an evaluative judgment (Portelli et al., 2010).

Highly effective teaching entails not only the application of research-based methods, but also leadership, content knowledge, life experience, organisation, commitment, wisdom, enthusiasm and applied knowledge (Hess, 2011). However, it is important to note that the influence of teacher characteristics on teacher effectiveness is not direct but mediated by their effect on the way in which teachers organise their classrooms and operate within them (Anderson, 2004). There is also the teaching context, which matters for teacher effectiveness, including factors such as class size, school size and organisation, curriculum approaches and opportunities for teacher collaboration.

Organisation of Practicum: Best Practice

The Practicum experience varies dramatically both within and across programmes, depending on how cooperating teachers are recruited and what the expectations are for both the novice and the cooperating teacher-mentor. There are also variations

in the extent and quality of modelling and guidance, from minimal to extensive; and the clarity regarding the practices desired, from obscure to well-defined. Mentoring also varies widely, with some novice teachers practising under daily supervision that includes planning, coaching, modelling, and demonstration, and others never having the chance to see modelled what they are trying to create in practice (Darling-Hammond and Baratz-Snowden, 2005).

The participating institutions in this TEMPUS project have provided varied scenarios of Practicum arrangements. What follows is a discussion of what, in our opinion, are effective approaches and arrangements of the Practicum experience. The level of contact time which student teachers have in the classroom; the kind of opportunities to teach; and the level of supervision provided; will be examined. Interlaced in this discussion is a sample of the scenarios presented by the institutions of the consortium, with the aim of highlighting the diversity which exists among them.

Time in the Field

The student-teaching experience requires a commitment of a substantial amount of weeks at the 'chalkface'. Extended Practicum experiences which are carefully developed to support the ideas and practices presented in simultaneous, closely interwoven coursework, can help prospective teachers gain sufficient knowledge and expertise (Darling-Hammond, 2006).

ORGANISATION OF PRACTICUM: EXAMPLES OF BEST PRACTICE

The Institute of Education London, UK

The first Practicum during the one-year post-graduate certificate of education is a five-week paired placement, starting with formally observing specific aspects or skills, to gradually planning parts of lessons, and with the mentor's support, delivering and evaluating them. The second and third practica are individual lasting six and eight weeks respectively.

Stockholm University, Sweden

A student spends twenty weeks doing school-based training spread across the years. Usually, students have a shorter Practicum of one or two weeks during the first semester, and at the end of most programmes, the Practicum lasts ten weeks.

Different strategies for Practicum experiences bring with them different benefits and limitations. Having multiple sets of Practicum may allow prospective teachers to consider how contexts make a difference in the choice of strategies and how to use them. Yet, short placements reduce the opportunities to deeply understand a group of students and a kind of practice, and may make it difficult for prospective teachers to learn how a chronology of events influences what is happening in the classroom. Moreover, shorter placements may be more problematic for schools to organise, unless the cooperating teacher remains present in class, in which case it would be easier to manage the logistics. When the Practicum phase, in some way or another, places burdens for schools to organise, it becomes more difficult for teacher preparation institutions to maintain strong partnerships for Practicum placements (Darling-Hammond and Baratz-Snowden, 2005).

There is no one arrangement or strategy which provides all the right answers. It is thus important that the Practicum experience is constructed carefully, after considering what the experience should be like and how it will be connected to the programme's curriculum, so that this experience is optimised.

ORGANISATION OF PRACTICUM: EXAMPLES OF BEST PRACTICE

American University in Cairo, Egypt

A facilitator helps to foster Critical Friendship Groups (CFG) among participating teachers. Each teacher or prospective teacher will carry out a number of peer observation sessions. Each of these observations is documented using standardised criteria and each participant is required to participate in an oral group discussion and complete a written reflection, both of which are focused on how the supervised teaching practice impacted classroom and professional practices.

University of Malta

The first part of the School Experience session involves reflecting on what is observed in schools and classrooms in a systematic and theoretically informed manner. This approach tries to bridge theory, research and practice through authentic learning situations. The students' observations are focused on a set of research-based issues and challenges and during weekly tutorials, students are encouraged to analyse classroom observations with the help of appropriate readings.

Gradual Induction

One can gradually introduce teachers to the field through periods of observation of classroom practice and familiarisation with the techniques and behaviours of accomplished practitioners. This will give way to short spurts of closely supervised teaching, which will then be followed by a second cycle of growth – a time of greater independence, experimentation, and consolidation. Further experience generally yields greater confidence, flexibility, and a sense of professional autonomy.

As the student teachers gradually assume more responsibility for classroom instruction, they can be encouraged to take on more responsibility within the school community, and critique their own practice. A journal can usefully be kept where students record their observations and reflections. Students can also be required to write a school case study and a child case study, develop their own lesson plans, and construct student assessments, graded papers and schemes of work.

ORGANISATION OF PRACTICUM: EXAMPLES OF BEST PRACTICE

Birzeit University, Palestine

The Practicum preparation course allows teacher candidates to gain familiarity with the school environment in which they will carry out their placement during Practicum I and Practicum II. During this course the student will have the opportunity to observe the school environment, experience its culture and observe teachers and students in action during authentic classroom instruction. In particular, the prospective teacher will focus on all the activities that happen in the school and in the classroom.

Stockholm University, Sweden

During the first Practicum the students are in most cases expected to follow the lessons given by their supervisors in the schools and discuss with them how and why a lesson was structured in a certain way. As the student becomes more experienced, s/he will be asked to teach her/himself. The first time the students are expected to teach, they will receive clear directions from the supervisor on what to do. During the last Practicum, the student teacher is expected to be able to organize her/his lessons independently.

Effective preparation for the Practicum

To help student teachers develop a well-defined perception of a complex practice, instructors and supervisors need to possess a set of categories for describing practice and then, during instruction, focus students' attention on these components of practice. Over time, many components of complex practice become routinised, but in the initial stages, components may require deliberate attention (Grossman, Compton et al., 2009). It is hence important for teacher preparation programmes to have clear goals and standards to outline the performances and practices which are to be developed. Supervisors need a full complement of tools like teaching standards, protocols for analysing student teachers' work, and formats for documenting observations and interactions (Yusko and Feiman-Nemser, 2008).

ORGANISATION OF PRACTICUM: EXAMPLES OF BEST PRACTICE

University of Leicester, UK

Currently, student teachers are assessed against the Teachers' Standards for Teachers, which comprise two sections – Teaching (encompassing a broad range of teacher knowledge, skills and understanding) and Personal and Professional Conduct. To ensure that student teachers are able to meet these standards without undermining the University of Leicester core focus on reflective teaching, all aspects of the training programme are mapped onto these standards. The purpose of this is to enable student-teachers to reflect on their professional learning in a way that explicitly embeds their deepening theoretical knowledge in their professional practice.

University of Malta

Although most of the Practicum phases have a strong summative component in them, they can also lead to a formative experience and during each teaching practice session, students are meant to develop particular competencies, skills or attitudes, while at the same time consolidating what has already been learnt. A number of characteristics are needed to develop effective learning environments. Examiners look for a number of basic qualities, while students are also encouraged to develop a number of additional skills and personal orientations which, in one of the documents used by some members of staff, are referred to as the seven Cs, namely: commitment, care, competence, control, creativity, critical spirit and collegiality. These orientations are a useful way of bringing together the desired key qualities in teachers. The Evaluation Booklets set out a range of micro-skills that examiners assess, some of which are highlighted for special attention in accordance to the year the student teacher is following.

The effectiveness of supervision also crucially depends on whether supervisors have the knowledge and skills to evaluate student teachers reliably in relation to established criteria, as well as on whether student teachers are prepared to use the results of supervision in such a way as to improve their performance. It is hence important that all those involved in teacher supervision receive adequate information and training to make the most of the process (Buhagiar, 2013).

Developing skills and competencies for teacher supervision takes time and requires a substantial commitment from teacher education institutions, the schools, and the main actors involved. Supervisors need to be informed of the 'how' and 'why' and trained in the appropriate approaches and techniques. A consensus needs to be reached, among all stakeholders, about the indicators

and norms that define school or teacher quality, and on how scores are to be determined. Student teachers are also to be given advice on how to succeed, including what to include in a portfolio and examples and ideas from past candidates and supervisors.

Conversations about teaching and learning can be structured around records of practice, including field notes from classroom observation and samples of students' work. Such data can also be used to support claims about the student teachers' progress, and identify areas for improvement. This moves feedback beyond self-report and personal opinion, to a new level of analysis and objectivity (although the latter notion may be problematic to attain and not always helpful). Debriefing conferences, their timing and frequency can also impact significantly on the supervision experience. It is not advisable that debriefing conferences revolve simply around the detailing of deficiencies and prescription of solutions. The supervisor must enact pedagogy and be responsive to what the student teacher is saying (Cuenca, 2012). This practice requires deliberate pedagogical efforts to advance the learning of student teachers. The feedback is not to be based only on the particular and situational inferences made from an observation, but must also be combined with programme aims, personal goals for and understandings of student teachers. It is also advisable that this debriefing conference includes written feedback aligned with identified criteria.

ORGANISATION OF PRACTICUM: EXAMPLES OF BEST PRACTICE

Alexandria University, Egypt

This university has developed a Practicum Guide. This guide provides essential information and guidelines for the student teachers and the supervising team. It also contains a number of tools for assessing the progress of student teachers, and other tools that student teachers can use for self-assessment. Furthermore, it has developed a 'Code of Student teachers' Rights and Responsibilities'. There is also a Practicum Bureau, responsible for planning and monitoring the Practicum programme and handling on-the-spot problems. This Bureau plans the regular meetings with the Practicum supervisors at the beginning of each academic year. These meetings provide the venue for sharing the culture of the Practicum, discussing the relevant issues and negotiating strategies for dealing with challenges.

The responsibility for supervision can strain the supervisors' ability to form trusting relationships with their students. It is important for supervisors to earn their students' trust by demonstrating their unwavering commitment, and by offering valuable and responsive support and guidance. The appropriate combination of meaningful assistance and responsible assessment can enable supervisors to form trusting relationships with the student teachers under their care (Yusko and Feiman-Nemser, 2008). Ideally, as a way of supplementing the supervisor's guidance, student teachers are also empowered to become competent self-assessors and independent autonomous practitioners: in some institutions, student teachers play an active role in planning the Practicum and they are allocated to the corresponding schools according to their needs and preferences. They interact with other student teachers from different schools and offer peer conferencing and peer tutoring.

Indications for policymakers

Challenges

One of the biggest challenges to effective Practicum concerns the large number of student teachers in relation to the number of supervisors. As a result, many student teachers cannot receive adequate monitoring of their development. There are also insufficient opportunities for them to practise teaching in real classrooms. The large numbers are sometimes a burden on schools, and some schools refuse to host student teachers. Alternatively, hosting teachers may not cooperate and are not always keen to have others observe them. Some are also not well-trained. Resources in some schools are limited, especially in terms of equipped education and microteaching labs. Moreover, some Practicum offices have no control over the choice of schools and the choice of collaborating teachers.

The duration of the Practicum is short for some institutions and thus not always sufficient to supervise and support student teachers. Summative forms of assessment for some Practicum experiences may also not be helping student teachers – when they are being constantly assessed during their Practicum, they may feel inhibited to expand on the feedback received from their examiners.

There are also logistic and administrative problems for some institutions. The location of the university campus may discourage some of the students from enrolling in the programmes being offered. When the language of instruction is only English, a number of students not knowing the language are inhibited from attending these courses.

Implications

- Teacher education programmes need to design their teaching Practicum course in such a way as to give the student teachers as much exposure to the real teaching world as they are allowed to and provide practical experience in classroom teaching.
- The paradigm of university-based teacher education needs to change from one where academic knowledge is viewed as the only authoritative source of knowledge about teaching, to one where there is a non-hierarchical interplay between academic, practitioner, and community expertise. One needs to consider different aspects of expertise that exist in schools and communities and which are brought into teacher education to coexist on a more equal plane with academic knowledge. When field experiences are carefully coordinated with coursework and closely mentored, teacher educators in both schools and universities are better able to accomplish their goals in preparing teachers to successfully enact complex teaching practices.
- Whole schools need to act as support for student teachers, with principals, school departments/year groups and teachers getting involved in the process.
- The role of the teacher trainer/educator needs to be reconceptualised and expanded to include facilitation, mentoring, tutoring and counselling in addition to teaching and instructing. This calls for a holistic approach to supervision emphasizing relationships and support.
- Student teachers can work alongside practising school teachers who can show them how to teach in ways that are responsive to learners, while integrating more theoretical learning from the university-based course. They can be directly supervised by one or more school teachers who model expert practice.
- Effective partnerships, underpinned by contract can help to create school environments for teaching and teacher training, through Professional Development Schools, lab schools and school reform networks and other local forms of partnership. These are strong models of practice and collaboration and the

environment itself serves as a learning experience for teachers.

- Effective partnerships are forged where schools themselves are committed to developing ITE and CPD courses; but also contribute to assessment decisions. On the other side they are characterized by FoEs that commit to wider partnership activities with schools; sustain tutors' visits to schools; and where there are shared observations of student teachers by university faculty staff and school staff.

- Such schools also engage in intensive professional learning for veteran teachers and may become hubs of professional development for their communities. Another form of partnership which can be developed between universities/colleges and schools is to place recruits as paid apprentices in teaching schools. These apprentices will teach and co-teach in the classrooms of expert mentor teachers for a year while they complete coursework in curriculum, teaching and learning with local partnering universities.

- It is important for universities and schools to develop a clear policy which governs the approach of the assessment of student teachers, both within the Practicum experience and across the different learning cycles of the pre-service stage. Such a policy may be based on a range of instruments such as self-evaluation, classroom observation and a teacher portfolio. This policy needs also to refer to standards for the teaching profession and serves both to improve practice, and to ensure accountability of students and staff.

- A range of stakeholders can be involved in the assessment of the Practicum, such as teachers, mentors, school leaders and educational administrators, together with faculty from universities and teacher education institutions. Educational authorities play a major role in assessment of student teachers because they set the national learning outcomes objectives, agree on standards for the teaching profession and establish the norms that regulate teacher evaluation.

- The assessment measures developed need to be valid, reliable and agreed by student teachers themselves in order for them to be fair and accurate. This can be problematic when external standards for assessment are imposed.

- The development of a learning community which can participate in the assessment of student teachers during their Practicum calls for better partnerships among academics, school leaders and field professionals.

School in Lebanon

BIBLIOGRAPHY

Alexandria University, Faculty of Education. 2012. WP 1.1 Baseline Report. Arab Republic of Egypt: Alexandria University.

American University of Beirut, Department of Education. 2013. WP 1.1 Baseline report. Beirut: American University of Beirut.

American University in Cairo, Graduate School of Education. 2013. WP 1.1 Baseline Report. Cairo: American University in Cairo.

Anderson, L.W. 2004. Increasing Teacher Effectiveness. 2nd ed. Paris: UNESCO: International Institute for Educational Planning.

An Najah National University. 2012. WP 1.1 Baseline Report. Nablus: An Najah National University.

Ashton, P. and L. Crocker. 1986. "Does Teacher Certification Make a Difference?" Florida Journal of Teacher Education 3, pp. 83–73.

Assuit University. 2012. WP 1.1 Baseline report. Arab Republic of Egypt: Assuit University.

Ben-Peretz, M. 2001. "The Impossible Role of Teacher Educators in a Changing World". Journal of Teacher Education 1) 52), pp. 56–48.

Birzeit University, Faculty of Education. 2013. WP 1.1 Baseline Report. Palestine: Birzeit University.

Bransford, J., L. Darling-Hammond, and P. LePage. 2005. Introduction. In: L. Darling-Hammond and J. Bransford, eds., Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do, pp. 39 – 1. San Francisco, CA: Jossey- Bass

Brownlee, J, N. Purdie, and G. Boulton-Lewis. 2003. "An Investigation of Student Teachers' Knowledge about Their Own Learning". Higher Education 45, pp. 25–109.

Buhagiar, M. 2013. "Mathematics Student Teachers' Views about Tutor Feedback during Teaching Practice". European Journal of Teacher Education 1) 36), pp. 67–55.

Cuenca, A. 2012. Introduction. In A. Cuenca, ed., Supervising Student Teachers: Issues, Perspectives and Future Directions, pp. vii–xvii. Missouri: Sense Publishers.

Darling-Hammond, L. 2006. Powerful Teacher Education. San Francisco, CA: Jossey- Bass.

Darling-Hammond, L., and J. Baratz-Snowden. 2005. A Good Teacher in Every Classroom: Preparing the Highly Qualified Teachers our Children Deserve. San Francisco, CA: Jossey- Bass.

Darling-Hammond, L., and J. Bransford. 2005. Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do. San Francisco, CA: Jossey- Bass.Elstad, E., 2010. "University-based Teacher Education in the Field of Tension between the Academic world and Practical Experience in School: A Norwegian Case". European Journal of Teacher Education 33 4)), pp. 74–361.

Evertson, C., W. Hawley, and M. Zlotnik .1985. "Making a Difference in Educational Quality through Teacher Education". Journal of Educational Research 3) 36), pp. 12–2.

Goldstein, J. 2009. "Designing Transparent Teacher Evaluation: The Role of Oversight Panels for Professional Accountability". Teachers College Record 4) 111), pp. 933–893.

Greenberg, J., I. Pomerance, and K. Walsh. 2011. Student Teaching in the United States. Washington, D.C.: National Council on Teacher Quality.

Grossman, P., C. Compton, D. Igra, M. Ronfeldt, E. Shahan, and P.W. Williamson. 2009. "Teaching Practice: A Cross-professional Perspective". Teachers College Record 9) 111), pp. 2100–2055.

Hargreaves, A. 1994. Changing Teachers, Changing Times: Teachers' Work and Culture in The Postmodern Age. London: Continuum.

Hess, F.M. 2011. Rethinking the Teacher Quality Challenge. PIE Network Summary Policy Briefs.

Labaree, D.F. 2008. An Uneasy Relationship: The History of Teacher Education in the University. In M. Cochran-smith, S. Feiman-Nemser, D.J. Mcintyre and K.E. Demers, eds., Handbook of Research in Teacher Education: Enduring Questions in Changing Contexts, 3rd ed. New York, NY: Routledge.

Loughran, J. 2001. Learning to Teach by Embedding Learning in Experience. Seattle: AERA.

Malinen, O., P. Vaisanen, and H. Savolainen. 2012. "Teacher Education in Finland: A Review of a National Effort for Preparing Teachers for The Future". Curriculum Journal 4) 23), pp. 18–1.

OECD. 2013. Teachers for the 21st Century: Using Evaluation to Improve Teaching. Paris: OECD Publishing.

Open University. 2013. WP 1.1 Baseline Report. Milton Keynes, UK: Open University.

Portelli, J.P., P. Solomon, S.E. Barrett, D. Mujawamariya, L.E. Pinto, and J. Singer. 2010. Stakeholders' Perspectives on Induction for New Teachers: Critical Analysis of Teacher Testing and Mentorship. Toronto: Ontario Institute for Studies in Education.

Saint-Joseph University – Faculty Of Education. 2013. WP 1.1 Baseline Report. Beirut: Saint-Joseph University.

Schön, D.A. 1983. The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books.

Shulman, L.S. 1998. "Theory, Practice, and the Education of Professionals". Elementary School Journal 5) 98), pp. 26–511.

Stockholm University – Department Of Education. 2013. WP 1.1 Baseline Report. Stockholm: Stockholm University.

Sultana, R.G. 2005. "The Initial Education of High-School Teachers: A Critical Review of Major Issues and Trends". Studying Teacher Education, 2) 1), pp. 43–225.

The Institute of Education, London University. 2013 . WP 1.1 Baseline Report. London: Institute of Education, London University.

University of Leicester – School of Education. 2013. WP 1.1 Baseline Report. Leicester: University of Leicester.

University of Malta – Euro-Mediterranean Centre for Educational Research. 2013. WP 1.1 Baseline Report. Msida: University of Malta.

Wilson, S.M., R.E. Floden, J. Ferrini-Mundy. 2001. Teacher Preparation Research: Current Knowledge, Gaps and Recommendations: A Research Report Prepared for the US Department of Education. Seattle: Center for the Study of Teaching and Policy.

Yusko, B., and S. Feiman-Nemser. 2008. "Embracing Contraries: Combining Assistance and Assessment in New Teacher Induction". Teachers College Record 5) 110), pp. 53–923.

Zeichner, K.M., and D.P. Liston. 1990. The Traditions of Reform in US Teacher Education. Journal of Teacher Education, 2) 41), pp. 20–3.

Zeichner, K.M. 1993. "Traditions of Practice in U.S. Pre-Service Teacher Education Programmes". Teaching and Teacher Education 1) 9), pp. 13–1.

SECTION III. CONTINUING PROFESSIONAL DEVELOPMENT: RESEARCH AND BEST PRACTICE

SECTION III.

CONTINUING PROFESSIONAL DEVELOPMENT: RESEARCH AND BEST PRACTICE

School in Lebanon

Defining Continuing Professional Development

The TEMPUS consortium has used the words 'Continuing Professional Development' (CPD) in a range of ways to cover the following practices:

- university and/or school-based Action Research;
- graduate research programmes in university;
- in-school or university-based occasional events such as short courses;
- mentoring and coaching;
- teacher learning communities and other peer support; and
- development through online provisions including micro-teaching.

CPD embraces all these interpretations and spans a spectrum of opportunities for teachers to develop professionally, including university teachers (or 'faculty'). We use the term interchangeably with 'teachers' learning' or 'teachers' self-learning'. By CPD, this report refers to the learning of those who are already teachers but who wish to improve their expertise as teachers. We distinguish this from initial teacher education in which the teacher has no teaching experience. However, in countries where practising teachers – and perhaps faculty – are not necessarily qualified to teach, this distinction can become blurred.

The learning of teachers through CPD could therefore take various forms, some occurring at the institution where a teacher works, others outside. It might entail the teacher attending lectures, workshops, conferences or support groups, collaborating with other teachers or reflecting individually, and it could involve an element of research. Thus the people whom we consider to be the educators of experienced teachers include both formal educators, such as tutors on structured courses like an MA, or senior staff in schools who offer appraisal observations; and also informal educators, such as the colleagues and students who offer helpful insights into a teacher's learning and that of her/his students: all of which lead eventually to improvements in students' learning and students' school experiences. We have therefore chosen in this report to focus on 'great CPD', using the word 'great' in the sense claimed by Stoll et al. (2012); that is, 'the best for learning', 'the most successful for pedagogy' or 'the most great in terms of learning'. We focus on the link between CPD and both pupil and teacher learning as the benchmarks for evaluating the 'greatness' of the CPD.

The effects of CPD can be defined in terms of teachers' own learning or reactions; organisational change; participants' use of new knowledge and skills; or, most recently, student learning (Guskey, 2000 cited in Earley and Porritt, 2013). Student learning outcomes can be defined widely as: enjoyment in learning; attitudes; participation; pride in and organisation of work; response to questions and tasks; performance and progress; or finally, engagement in a wide range of learning activities (Frost and Durrant, cited in Earley and Porritt, 2013). Such outcomes can be achieved through a range of CPD processes.

Research and principles in CPD literature: best practice

The principles for 'best practice' in the academic research literature relating to CPD include:

- participants of CPD identify their needs for, and the form and the content of, their own professional learning, in dialogue with others;
- participants of CPD reflect, talk, inquire and challenge each other collaboratively, within and/or across institutions, often in learning communities;
- the institution, especially its leadership, makes space and gives support to those who are learning; and
- some input for learning comes from beyond the institution, but the main site for CPD learning is the institution itself.

The following sections explore some principles which are considered in much internationally available literature as essential for the success of CPD. They thus proxy as standards against which an institution might self-assess its progress in CPD. It is notable, however, that such literature tends to be based in countries of the west such as UK, USA, Australia and Scandinavia. Some research into CPD is also carried out in South East Asia and South Africa, but few such resources stem from MENA countries. Of course this does not mean that MENA countries do

not have important practices and insights, only that these are less likely to reach international academic journals.

Principle I. Participants of CPD identify their needs for, and the form and the content of, their own professional learning, in dialogue with others

Autonomous action features as a critical ingredient of successful CPD. Research reviews indicate that great CPD is provided when a need has been identified by the participants as of importance to themselves as individual professionals, albeit professionals operating within a community. 'One size fits all' standardised provision is unlikely to be great because it does not take account of teachers' existing knowledge, experience and needs (Hustler et al., 2003; James and McCormick, 2009). Teachers' commitment to CPD seems to be heightened where they autonomously initiate change and then receive support in planning and implementing those changes (Wilkins, 2011). Where teachers initiate their own change, the CPD will necessarily be relevant to the particular participants and their classrooms. Where teachers do not volunteer to start a process, schools must focus on engaging them and challenging problematic discourses (Postholm, 2012). This sounds easier in theory than in practice and many teachers in the world seem to operate on the assumption that if their students succeed well enough in their examinations, then these teachers need no change. In contrast, authors such as Hustler et al., Postholm and Wilkins assume that teachers never reach a point where they cease to require learning; but they also assume that much learning takes place informally through talking with colleagues and students.

The experience of autonomy is necessary for any learning which leads to significant change. Assuming that teachers intend to change for the better, this means teachers must sense the power of their own autonomy. This also applies to their students. Within the constructivist conception of learning, when the learner does not act autonomously, then learning is superficial and entails little restructuring of how the learner makes sense of experiences, and therefore leads to minimal change in actions or thoughts (Watkins, 2010). Kolb (1984) describes the cycle of experiential learning, whereby learning is the outcome of reflection on action, which then leads to a change in action. Edwards (2006) likewise describes how learning can be equated with acting wisely in the moment, regardless of knowledge stored in one's 'mind'. Stoll et al. (2012) remind us that great CPD "recognises, endorses and actively models the best ways that adults learn" (p. 6; our emphasis). Thus activities to support adults' learning about teaching must build on research and local feedback about how adults learn to best effect. One of the most fruitful focuses in CPD is also understanding how students in general learn best, and thus a research-based conversation about learning can become the cornerstone of CPD. Some key research in recent decades has suggested that people do not learn well if they fail to see the purpose of the learning, if they are inactive, if the learning is unrelated to their needs or interests, or if negative emotions are associated with learning (Illeris, 2007; Wells, 2000). Thus the traditional formal classroom no longer seems to offer the best opportunities for children's or adults' learning.

CONTINUING PROFESSIONAL DEVELOPMENT FOR TEACHERS: EXAMPLES OF BEST PRACTICE

The Open University [UK] was set up on the basis of school teachers' self-regulated learning and the tailoring of education to their specific needs. In keeping with this, school teachers taking Open University courses have the option of reformatting the e-resources they gain during Open University degrees, for use in their classroom and at school CPD meetings.

Action Research (AR), as mentioned by all participating universities, is one key practice associated with this principle. Teachers as researchers act as change-agents in classrooms and schools (Vrijnsen-de Corte, 2013). This is because we define AR as part of developing teachers' professional identity and as part of their independent thinking and innovative practice. AR is concerned primarily with providing individualised practical solutions and thence theories, to a teacher's real situation (Reason and Bradbury, 2004). It originated in the 1930s and 1940s, is linked to social and organisational change from within, and usually involves a constant cycle of planning, taking action, observation and reflection leading to further change (McNiff and Whitehead, 2011). This applied approach contrasts with traditional scientific research which needed to comply with strict external models. Historically, it has been practising teachers and faculty who have led AR, and in education AR appears under the guise of 'teacher-as-researcher' and 'reflective practitioner' (Schön, 1991). Action research has grown in parallel with social justice agendas (Carr and Kemmis, 1986; Somekh, 2006) and a key aim here is an emancipatory one as teachers research their own practice to empower themselves and to actually make a difference to their students' learning and more broadly, to human flourishing.

Finally, the role of theorising in AR, which aims to change pedagogic practice needs to be stated, as practitioners might be content with only a descriptive record of their own understandings (Carr and Kemmis, 118 :1986). Norton (2008) views pedagogical AR as a synthesis of theory and practice. From this perspective, the fundamental purpose of pedagogical AR is to systematically investigate one's own teaching/learning practice, with the dual aim of improving that practice and contributing to theoretical knowledge in order to benefit student learning. In this role, the practitioner takes the authority of generating theory on themself, in an explicitly autonomous act of research.

CONTINUING PROFESSIONAL DEVELOPMENT FOR TEACHERS: EXAMPLES OF BEST PRACTICE

How to do Action Research in a school

In effective Action Research, the practitioner herself inquires into her own teaching practices and identifies a problem she would like to work on. She carries out research in her own school, faculty or classroom, usually talking with students and/or colleagues to increase understanding of the issues.

Once the practitioner feels she has a greater understanding of all the issues, she works on producing some possible solutions to the problem, based on new theories she has developed through her research.

In trying out these solutions, the next phase of the research cycle begins and the practitioner proceeds to review and learn from her findings and make some new inquiries. This process continues for several cycles until the problem seems completely changed, whether resolved or having become something new.

In this way, an individual teacher/lecturer keeps on learning, focusing on increased competence in her own teaching and enhancing her students' learning in ways that seem appropriate to that individual.

QUESTIONS FOR POLICYMAKERS

The powerful impacts of AR processes have been widely documented, for example, by Leahy and Wiliam (2011) describing the 'choice principle':

When teachers [or faculty] themselves make the decision about what it is that they wish to prioritize for their own professional development, they are more likely to 'make it work'…. when the choice about the aspects of practice to develop is made by the teacher [or faculty member themself], then the responsibility for ensuring effective implementation is shared. (p.59)

When supporting teachers to carry out Action Research:

What impact do you want them to have on pupils? How will you know when they have had this impact?

What practices do they therefore need to implement?

What time/resources do people need to do this?

What knowledge and skills need to be developed in order to achieve your goals?

What training activities do people need to do this project?

The practice of peer coaching can be a useful vehicle for helping teachers to consider these issues in depth (Stoll et al., 2012). This way a clear and meaningful focus can be established to guide each researcher's learning.

The use of a Learning Journal can assist in this too. The learning journal can, indeed, be a vehicle for CPD in its own right and is highly adaptable to context. As a basic description, it consists of the teacher noting down her/his reflections about teaching and/or learning on an ongoing basis and in situ; at regular intervals, and ideally with the support of a peer, the teacher examines the notes and makes choices about changes to her/his future actions.

CONTINUING PROFESSIONAL DEVELOPMENT FOR TEACHERS: EXAMPLES OF BEST PRACTICE

Malta Faculty of Education's model of allowing the MA dissertation to consist of an AR project rather than a traditional dissertation might also be helpful in promoting teachers' learning and change.

Principle II. Participants in CPD reflect, talk, inquire and challenge each other collaboratively, within and/or across institutions, often in learning communities

Collaboration appears to be a key feature of the most useful CPD (Cassidy et al., 2008; Garet et al., 2001) and is central to the structure of learning communities in or across schools. Observing peers teaching or carrying out Lesson Study (Lawrence & Chong, 2010) is considered a core CPD collaborative practice because it supports the de-privatisation of practice (often associated with teachers' defensiveness and fear of being judged), fosters accountability among participants and focuses directly on classroom teaching and learning. Collaboration contributes to teachers' 'adaptive expertise' (Hammerness et al., 2005 cited in Postholm, 411 :2012), which means their ability to learn something from others on a continuing basis. Zwart et al. (2009) illustrates how classroom pedagogic change is maximised as a result of peer observation or peer teaching and accompanying feedback; and Postholm (2012) points out that this observation might be via video if an actual observation is not possible.

The disposition to collaborate seems to change with age, as more experienced teachers seem less inclined to work collaboratively (although more inclined to study educational research) (Postholm, 413 :2012). Productive collaboration, however, necessitates that participants experience the necessary autonomy to assume responsibility, as illustrated in Principle I, described above. It also demands that they use inquiry for individual and group development, which involves turning data and experience into knowledge through reflection; and using evidence for decision-making. In a culture where teachers are used to being told what to do, such as the Egyptian system, it may be difficult for teachers to initiate their own inquiries.

Collaboration also demands that participants treat all other members with equal respect (Stoll et al. 226 :2006). This implies an egalitarianism – a manifestation of respect for individuals' autonomy – in which ascribed status is irrelevant, where all practitioners can become leaders of pedagogy. However, such egalitarianism tends to operate as an ideal outcome, more than a process reality. The issue is starkly flagged up by Postholm (415 :2012):

*If a school [or faculty] culture has an ordered,
hence top-down,
strategy for promoting teacher performance,
the teachers will have a negative attitude to informal learning.*

In a supportive learning culture, reflective dialogue flows freely (Little, 1992), although collaborative dialogue is not necessarily without intellectual conflict (Achinstein, 2002): indeed, some form of challenge to participants' thinking is what often leads to change (Stoll et al., 2012). However, the organisation of learning communities – groups of collaborating teachers – can allow greater or lesser participant choice and decision-making power and thus vary in their effectiveness; but by their nature, they focus on strategies identified by teachers themselves as useful for their own classrooms.

School in UK

CONTINUING PROFESSIONAL DEVELOPMENT FOR TEACHERS: EXAMPLES OF BEST PRACTICE

How to run a Teacher Learning Community in a school

Leahy and Wiliam (2011) initiated the idea of structured 'Teacher Learning Communities (TLCs)' to support the development of Assessment for Learning strategies in school classrooms. This is another – very specific – model of Learning Community that has been practised by schools in London (Hargreaves, 2013). These authors suggested that monthly TLC meetings were preferable to either less or more frequent ones. Leahy and Wiliam claimed that 75 minutes was a minimum time for TLC meetings to run and that 8 to 12 participants was the optimum number. During meetings, teachers talked about what they had been trying out in their classrooms and what future plans for improvement they had, allowing other teachers to comment on and to question their principles and practices. Leahy and Wiliam developed the following agenda structure for TLC meetings:

Introduction (5 minutes)

Agendas for the meeting are circulated and learning intentions presented.

Starter activity (5 minutes)

Participants engage in an activity to focus on their own learning.

Feedback (25 minutes)

Each teacher gives a brief report on what they committed to try out during the 'personal action planning' section at the previous meeting, while the rest of the group listen appreciatively and then offer support to the individual in taking their plan forward.

New learning about formative assessment (20 minutes)

Each meeting includes an activity that introduces some new ideas about formative assessment. This might be a task, a video to watch and discuss, or a 'book study'.

Personal action planning (15 minutes)

This session involves each of the participants planning in detail what they hope to accomplish before the next meeting. This may include trying out new ideas or consolidating techniques. This is also a good time for participants to plan any peer observations and feedback that they hope to undertake.

Summary of learning (5 minutes)

In the last five minutes of the meeting, the group discusses whether they have achieved the learning intentions they set themselves and negotiates those for the next meeting. Such conversations depend, ultimately, on how well individuals collaborate and talk professionally.

Principle III. The institution, especially its leadership, makes space and gives support to those who are learning professionally

CPD that is integral to the daily operations of the institution is another characteristic of great learning, rather than being held in one-off, off-site sessions (Garet et al. 2001; Postholm, 2012). Great CPD in schools or the faculty, from this perspective, depends on teachers having frequent opportunities to witness first-hand the effects that their own learning efforts are having (Baker and Smith 1999; Schechter 2010). Such a CPD process will not be swift, with some researchers suggesting that one year is not enough (Zwart et al., 2009). Such CPD has to be continuous and ongoing, involving follow-up and support for further learning on sustained and needs-based terms, obliging the learning educators to direct their own learning, but also rewarding that learning with time, support, money or all three. Rewards in this context act as basic essentials rather than 'carrots' to entice participation.

As with all learning, the purposes and outcomes of learning affect the processes and the effort applied to it. However, learning needs constant reinforcement even when the purposes and outcomes are clear. All educators have busy lives and CPD that has no special niche in their schedules is likely to be weak. CPD needs to be an integral part of the institution's timetable rather than an addition to it. Likewise, where teachers already have poor resources or poor salaries, then CPD tends to be superficial at best. In an institution where the principal, or Senior Management Team, are all active in their own CPD, and provide time for other educators to focus on theirs, CPD is more likely to thrive. The leaders in an institution need to role-model learning (Stoll et al., 2012; Timperley et al., 2007). Leaders who model individual innovation, risk-taking, mistake-making and also collaboration are likely to be the most successful because they will stimulate the meta-cognitive processes that support teachers in driving their own development. In Stoll et al.'s words, there must be "no tension between the respective needs of the individual, team and institution" (5 :2012). Indeed, all teachers must be part of the process to help develop the whole-school approach that is most useful (Vrijnsen-de Corte et al., 2013; Timperley et al., 2007).

CONTINUING PROFESSIONAL DEVELOPMENT: EXAMPLES OF GOOD PRACTICES

A key practice which operationalises this support is that of Senior Managers providing staff with days off work in exchange for time devoted to individual and/or group CPD practices (Hargreaves, 2013). Alternatively, stand-in staff are provided to teach in order to free other staff to visit colleagues in their classes. Another example is that of the institution's principal building in observation and reflection time within the faculty or school timetable and actually teaching sessions for staff so that they have the valuable opportunity of observing each other.

School in Lebanon

Principle IV. Some input for learning comes from beyond the institution, but the main site for learning is the institution

Researchers into CPD generally agree that CPD for school teachers is most effective when carried out in schools themselves rather than for schools by universities (Postholm, 2012; Stoll et al., 2012). This is because, in McElhone and Tilley's (2013) words, "Development occurs through reflective engagement in contextualised activity mediated by tools and by social relationships" (our emphasis). Peddar et al. (2005) illustrated the differences teachers made between learning in school and learning outside and suggested that teachers valued the range of opportunities. However, research into CPD provides overwhelming evidence that CPD that is based inside individual schools is one essential element for success. In England currently, as described by IoE [UK], the balance has shifted from universities having the main responsibility for developing pre-service teachers to the schools themselves shouldering this burden. If the balance shifts too far this way, new, equally destructive problems might arise. However, research into school-based professional learning has indicated that input of information from further afield can be an important part of useful CPD; and looking beyond the school for sources of learning and ideas is a key ingredient, even though the main site for developmental action remains the school. This is because great CPD has to be part of a comprehensive change process rather than only a local one (Garet et al. 2001). Hawley and Valli (1999) argued that successful CPD provides opportunities for each teacher to engage autonomously in developing a theoretical understanding of the knowledge and skills to be learned, and is not just a matter of 'best practice' being passively disseminated. Thus university education departments might be very helpful partners in the process of engaging teachers in their professional development where the university and the school each play a full part in the project (Vrijnsen-de Corte, 2013). Turner and Simon (2013) describe the increased sense of professional identity gained by master's students of education as a result of the theory they had obtained from their master's research, and their greater confidence to experiment in the classroom.

External input can be provided in university courses, online programmes, reading material and published research, but these need to be part of an ongoing, school-based process rather than of isolated teaching sessions. Any of these sources can support teachers in conducting their own AR reflectively. The appropriate balance between in-school and beyond-school support is an essential but not an easy one to operationalise, especially when teachers in schools lack competence or the desire to learn. However, a good mixture of in-school and outside-school stimuli will ensure that CPD opportunities fulfil the criterion of being varied and rich, a criterion that Stoll et al. (2012) regard as fundamental. They can then challenge and stimulate new thinking, shaking teachers into a recognition of how they might wish to change.

CONTINUING PROFESSIONAL DEVELOPMENT FOR TEACHERS: EXAMPLES OF BEST PRACTICE

University of St. Joseph, Beirut, Lebanon

The university explicitly supports teachers within their own partner schools to run AR projects and initiate changes.

USJ also outlines a two-year project in its Catholic schools where teachers' classes are video-taped as the basis for regular meetings to discuss practice improvement with teachers.

In turn, universities need stimuli from beyond their own campuses for their own teaching and development. All the universities in this project demonstrated good links to international or national bodies which fund or support their CPD programmes.

Development through online provisions including micro-teaching

The use of Information and Communications Technology [ICT] is becoming increasingly important for CPD, especially in poor countries where educational infrastructures are lacking (Kidd & Murray, 2013). For example, in Bangladesh, a powerful CPD model is being developed which depends on teachers' use of their personal mobile (cell) phones (Walsh et al., 2013). The Open University [UK] is famous for its online learning resources, including free resources for teachers on their OpenLearn site. The use of technology for CPD could include a wide range of methods, including a school-teacher or faculty member using IRIS – the robot video-camera – in their own classroom; the one-way mirror whereby teachers can be observed by colleagues without being disturbed by them; online courses or resources including online literature as well as open blogs and wikis; social networking sites such as Facebook and YouTube; and of course e-mail, Skype, Viber and texting, which facilitate communications among teachers and faculty. The possibilities are increasing rapidly as we write (Daly et al., 2009; Nance et al., 2007).

Partnership in Continuing Professional Development for teachers: Examples

The partnership between the school and the university, as a provider of CPD is notoriously problematic (Vrijnsen-de Corte et al., 2013). It was one of the issues that inspired the establishment of this current TEMPUS project from the outset. Postholm (2012) differentiated between the power of the authoritative versus the authoritarian word. Authoritative content in university lectures builds on the interests and backgrounds of participating teachers in an active way and thus contributes to their learning. Lectures are authoritative when the themes they address are directly relevant to school settings. Otherwise, when an authoritarian approach is taken, and it is the lecturer who decides on priorities, the lecture might prove to be an obstacle, rather than a support to teachers' professional learning. Botha and Breidlid (in Holmarsdottir et al. 274 :2013) noted an authoritarian approach in higher education institutions which tended to favour 'propositional' knowledge and their students' acquisition of technical academic or professional skills. They focused on these specific skills rather than on learning as a social phenomenon that affects the whole person which tended to limit the usefulness of CPD projects between universities and schools.

White (2013) stressed the importance of making tacit professional knowledge explicit to teachers undergoing initial or CPD, because this explicitness links research-based theory to practice. This job falls to university staff because such awareness-provocation is often lacking in the school setting. During exclusively school-based CPD, learning teachers may be observing experienced teachers, but these teachers may not articulate their professional skills/knowledge or link them to educational theory. In other words, teachers can mimic common practices without reflection on their effectiveness or fitness for purpose: it is in this domain that theoretical constructs provided in university lectures can allow the learning teacher to move beyond the immediate situation to consider practice within the wider field of educational purposes and expertise. For this to happen, faculty in education departments need opportunities to reveal their thinking firstly to themselves so that they can better explain this to other teachers rather than just trying to 'tell' them (White, 2013). This way, they reveal their own 'lay theories' (Furlong, 2013) about learning, which they might then use to challenge themselves or their student teachers.

In general, some kind of partnership between universities and schools seems ideal for promoting CPD. This might mean that the university researcher/tutor acts as a starting point for some in-school research, which they then support through visits; or regular meetings of school teachers at the university where they discuss their practices. High hopes were held for school-university partnerships at different points in time and in different parts of the world, and successive evaluations have found that those hopes remain unfulfilled in many cases due to a 'litany of barriers' (Smedley, 2001). Vrijnsen-de Corte et al.

(2013) cited many reasons that make school university partnerships problematic and these are considered below.

In building partnerships between universities and schools for CPD there is a nexus of research-based theory and practice. The research-based theories underpinning teacher development have to be bridged to the practice of the classroom. Inherent in this connection is the tension caused by cultural differences between the two sectors – with perhaps a greater emphasis on research in the university and on practice in the school. These differences are, perhaps, the primary cause of the barriers. The issue of partnership in professional development is to seek a middle ground.

There is also a substantial logistical challenge of partnering one, complex, university with multiple schools. This yields other challenges such as the imbalance of staffing resources between the university and its many potential partner schools and the prioritisation or balancing of relationships between the university and various schools. In addition, partnerships are often based on individual relationships, but movement of key staff can then make them fragile. Equally, moving beyond an existing known individual, for example by training up a wider group to work with schools, can be challenging.

QUESTIONS FOR POLICYMAKERS: CPD PARTNERSHIP BETWEEN UNIVERSITIES AND SCHOOLS

Is there a standing arrangement for schools and universities to meet and review ways of working? Are these encapsulated in written partnership agreements?

To what extent, if any, does a partnership between schools and universities for CPD build on existing relationships for Practicum? Can the university work with schools that have ITE students to continue working together for CPD?

How is the relationship between the university and the schools brokered? Is there a mutuality in the relationship or are there other factors which cause one side to lead the partnership?

Is the partnership based on a project-by-project approach or is there a more long-term protocol for joint work? If the latter, how do the partners ensure that there remains value in the partnership rather than it becoming institutionalised but ineffective? How is the value of the partnership for CPD evaluated?

Are there any opportunities for staff in schools to work in the university (e.g., as visiting lecturers) and/or for faculty to work in the schools?

Leadership in CPD: Examples

Partnerships and networks are not naturally self-organising. They require collaborative partnership leadership which is distributed and shared across the boundaries between the partners (Bickel and Hattrup 1995). Opinion leaders – who may or may not be in formal roles – play a pivotal role in shaping and galvanising successful partnerships that overcome the cultural and practical barriers faced. It is clear that those embarking on partnerships need to develop a clear vision and a joint purpose based on commonalities – identifying the precise benefits of working together. This would require a shared language, guided by an effective leader.

The role of brokers, match-makers and translators can empower others to engage

in a dialogue. This intermediary level needs to be recognized and requires investment. Strategic leadership would also be needed for effective partnerships to be sustained. All voices need to be heard. Successful partnerships reject a hierarchical approach in which the university dominates and practitioner knowledge is devalued. Instead, the recent work on design-led partnerships in the United States (Byrk et al., 2011) builds on previous examples where schools and university staff have an equal voice and practitioner priorities and knowledge are valued.

Issues relating to leadership in partnerships for CPD

- Leadership of CPD needs to define what success or good practice in CPD looks like and how it should be judged. This requires evaluation and the development of appropriate metrics and impact measures.

- Leadership of CPD requires decisions as to what form the recognition of success should take and who should be rewarded i.e., the individual or the institution. Individual 'rewards' may have to take the form of professional recognition and pay (with schools' engagement made integral to people's roles and written into contracts, job descriptions, and so on) in order to effect a change of culture. Institutional and departmental school awards can be awarded on the basis of effective support for partnership work. A key focus for these awards should be on communicating and celebrating effective practice in order to raise the profile of this work and highlight the lessons learned.

- Leadership for partnership of CPD must ensure that all partners are on board and mutually supportive; that there is transparency in the workings of the partnership; and that responsibilities, tasks and roles are formalised (Vrijnsen-de Corte, 2013). Without this there may be a lack of trust and respect between partners and a paucity of effective communication.

- Partnership activity that is closely aligned with institutions' strategic priorities is more likely to succeed.

- Legal frameworks, including accountability and imposed models and timescales, make partnerships difficult.

- Taking teachers 'off timetable' is a real issue in terms of partnering with universities.

QUESTIONS FOR POLICYMAKERS: LEADERSHIP OF PARTNERSHIPS BETWEEN SCHOOLS AND UNIVERSITIES

Does the leader of the school-university partnership have support for developing a high-level vision that aligns policymaking, funding decisions and practice in the domain of CPD?

Is such a vision clearly communicated by the leaders, to set out the direction of learning journey with metrics for anticipated impact?

What should the rewards for successful leadership in CPD be? Should they go to individuals or institutions?

Are the skills and capacity required for intermediary brokerage of CPD understood and their importance recognised? (i.e., middle leadership)

Are the university-school partnerships for CPD linked with wider public engagement? If so, this will enhance its importance and impact on the university's strategic mission.

How do leaders allow for the voice of the teacher to be instrumental in shaping and implementing the policies of CPD? Teachers listen to other teachers, so the question is how to draw on this in funding for CPD and developing school-based roles at the leadership level?

What training would be required for the brokers and key players in the development of CPD partnerships?

CONTINUING PROFESSIONAL DEVELOPMENT FOR TEACHERS: EXAMPLES OF BEST PRACTICE from the UK

Example I: Teach First in the UK

Teach First is a charity that trains high-achieving graduates in an employment-based teacher training route. Teach First's aim is to tackle educational inequality (TeachFirst Website 2014). Participants are therefore placed in schools in areas of high deprivation. After an intensive initial six-week summer course, the participants become classroom teachers. Although they are on an employment-based teacher training programme, they are employed by each school as unqualified teachers and do not have a choice of the school in which they are placed. At the end of the first year of their training, participants gain qualified teacher status (QTS) and a Postgraduate Certificate of Education (PGCE). In the second year they go on to develop their leadership skills. They are therefore committed to a school for at least two years, with no option to change.

Example II: University College London (UCL) and the UCL Academy (Secondary School) in the UK

University College London (UCL) is the sole sponsor of the state secondary school called the UCL Academy. The various constituencies in UCL have provided material help in a number of ways:

Where the Academy does not have specialized equipment, students can carry out practical elements of their studies in UCL labs and workshops; e.g., A2 Engineering: testing the tensile strengths of metals is impossible in schools but feasible in UCL labs.

All staff and Level 3 students are able to use the UCL libraries in a 'reader' capacity.

On a termly basis, artefacts are loaned from various UCL museums and galleries and installed in the Academy.

Another of the fundamental building blocks from which the Academy is made is the global dimension; all students and staff learn Mandarin. Native-Mandarin-speaking UCL students visit the Academy during lessons and support the teaching staff there, both in language learning and cultural exchange.

An important aspect of the Academy learning week is the chance for students to choose from a diverse range of opportunities to investigate, usually alongside UCL students. These have included 'Model United Nations'; 'iGEM'; 'Debating'; 'Cheerleading', and so on.

Students of the UCL Musical Theatre group have helped direct Academy students in two productions: 'Hairspray' and 'High School Musical'.

Successful UCL graduates, including many alumni, attend informal networking meetings with Academy pupils. These aim to give students an insight into how successful people have attained their positions.

Every staff member at the Academy is a member of an active research group, looking into such areas as 'pedagogy', 'curriculum', and so on. Links between UCL and these groups underline the pre-eminence given by the Academy to it being a research-led organization.

Sponsor and Academy have identified a member of their staff to act as the interface between all links.

Example III: The Schools-Universities Partnership Initiative (SUPI), UK

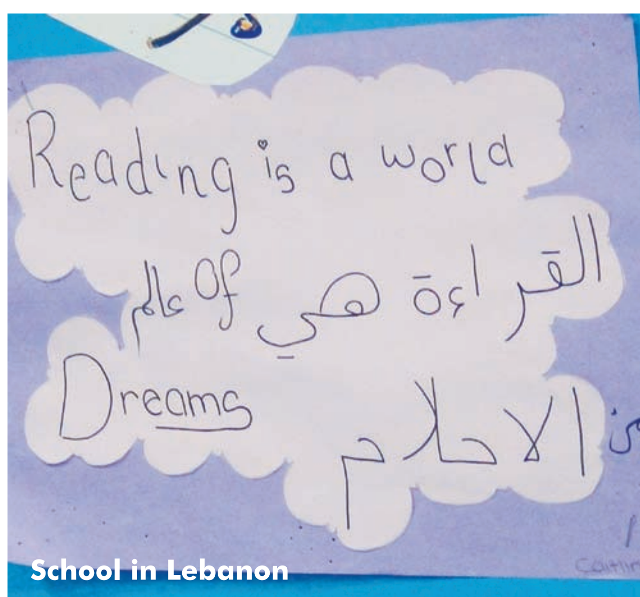
In the UK, the Schools University Partnerships Initiative began in 2012 with three-year funding to twelve Higher Education Institutions to work with secondary schools across the UK. The objectives were to link researchers from a range of disciplines with teachers and classrooms in ways that would enrich the quality of teaching and learning, enhance the skills and impact of early career researchers and raise aspirations for research careers among school students. The distinctive characteristic of this scheme is that, where possible, universities have been encouraged to work with groups of schools (e.g., Teaching School Alliances) so that they increase their reach and stand a better chance of developing more sustainable long-term partnerships.

Indications for policymakers

The four principles of successful CPD need to be honoured in practice and supported by policy. Since it is important for successful CPD that some inputs for learning come from beyond the schools, even though the school remains the main site for learning, it becomes very important for it to foster strong partnerships with the university in order to facilitate this.

In relation to this last point, effective partnership with the university is essential. In order to facilitate this:

- Cultural differences between universities and schools should be openly identified and understood so as to create a 'third space' for CPD partnership work – neither university nor school – and to reduce barriers. This includes teasing out the actual and perceived differences for different types of universities and schools as well as the commonalities (e.g., both teach young people and want the best for them).
- Clear criteria should be developed for universities and schools entering into partnership so that both sides are clear of their entitlements and obligations. This increases engagement and ensures there is an institutional commitment.
- The development of a quality evaluation model which places intermediate process targets (or outcomes) at the centre of the partnership activity is a necessary condition for successful and sustainable partnerships.
- There must be an explicit recognition of, and support for the idea that there is not a 'one size fits all' model, either for CPD generally or for CPD partnerships. Leadership should allow the partnership to grow to meet its own needs, to draw in other bodies where appropriate (such as learned societies or subject associations), and to allow school-driven networks to form the basis for partnership (rather than always be driven by FoEs).
- Communicating to the wider community all the benefits of the partnership between schools, universities and funders in CPD will render the partnership much more powerful. An enhanced evidence-base on impact and benefits will help enormously.
- Establishing the roles of brokers and 'boundary spanners' enables the 'third space' between FoEs and schools to be developed. Key roles for these intermediaries include knowing the local context and encouraging conversations between school and university teachers. This should be allied to career recognition and training.



School in Lebanon

BIBLIOGRAPHY

Achinstein, B. 2002. "Conflict Amid Community." Teachers' College Record 55–421 :(5) 104.

Baker, S., and S. Smith. 1999. "Starting Off on the Right Foot: The Influence of Four Principles of Professional Development in Improving Literacy Instruction in Two Kindergarten Programs." Learning Disabilities Research and Practice 53–239 :(4) 14.

Bubb, S., P. Earley, and A. Hempel-Jorgensen. 2008. Staff Development Outcomes Study Report. London Centre for Leadership in Learning: Institute of Education.

Cassidy, C., D. Christie, N. Coutts, J. Dunn, C. Sinclair, D. Skinner, and A. Wilson. 2008. "Building Communities of Educational Enquiry." Oxford Review of Education 35–217 :(2) 32. doi: 03054980701614945/10.1080.

Daly, C., N. Pachler, and C. Pelletier. 2009. Continuing Professional Development in ICT for Teachers: A Literature Review. London: WLE Centre, Institute of Education, University of London.

Earley, P., and V. Porritt. 2010. Effective Practices in Continuing Professional Development: Lessons from Schools. London: Institute of Education.

Earley, P., and V. Porritt. 2013, forthcoming. "Evaluating the Impact of Professional Development: The Need for a Student-focused Approach". Professional Development in Education.Edwards, A. 2005. "Let's Get beyond Community and Practice: The Many Meanings of Learning by Constructing or Co-constructing Knowledge." Curriculum Journal 66–49 :(1) 16.

Fielding, M. 1996. "Beyond Collaboration: On the Importance of Community." In D. Bridges and C. Husbands, eds., Consorting and Collaborating in the Education Market Place, 167–149. London: Falmer.

Findlow, S. 2008. "Islam, Modernity and Education in the Arab States". Intercultural Education 19 52–337 :(4). doi: http://dx.doi.org/14675980802376861/10.1080

Furlong, C. 2013. "The Teacher I Wish to Be: Exploring the Influence of Life Histories on Student Teacher Idealised Identities". European Journal of Teacher Education 83–68 :(1) 36.

Garet, M., A. Porter, L. Desimone, B. Birman, and K. Yoon. 2001. "What Makes Professional Development Effective? Results from a National Sample of Teachers." American Educational Research Journal 46–915 :(4) 38.

Gross, Z. 2013. "The Attitudes of Israeli Arab and Jewish High School Students towards Extrinsic and Intrinsic Values". Journal of Moral Education 101–88 :(1) 42. http://dx.doi.org/03/10.1080 057240.2012.685803

Hargreaves, E. 2010. "Knowledge Construction and Personal Relationship: Insights about a UK University Mentoring and Coaching Service". Mentoring and Tutoring: Partnership in Learning 18 20–107 :(2).

Hargreaves, E. 2013, forthcoming. "Assessment for Learning and Teacher Learning Communities: UK Teachers' Experiences". Teaching Education.

Hargreaves, E., and S. Preece. 2013, forthcoming. "The Value of the Personal in Teachers' Professional Learning: A Case Study." Professional Development in Education.

Hargreaves, E., R. Berry, Y. Leung, D. Scott, and G. Stobart .2013. "Teachers' Experiences of Autonomy in CPD: Teacher Learning Communities in London and Hong Kong." Teacher Development 35–19 :(1) 17.

Hawley, W., and L. Valli. 1999. “The Essentials of Professional Development: A New Consensus.” In L. Darling-Hammond and G. Sykes, eds., Teaching as the Learning Profession: Handbook of Policy and Practice, 80–151. San-Francisco: Jossey-Bass.

Holmarsdottir, H., D. Zubeida, L.R. Botha, A. Breidlid, S. Bastien, W. Mukoma, M.J. Ezekiel , A. Helleve, A.I.Farag and V. Nomlomo. 2013. COMPARE Forum: “The Idea of North–South and South–South Collaboration.” Compare: A Journal of Comparative and International Education 86–265 :(2) 43. doi http://dx.doi.org/10.10 03057925.2013.765274/80

Hustler, D., O. McNamara, J. Jarvis, M. Londra, and A. Campbell. 2003. Teachers’ Perceptions of Continuing Professional Development. Research Report RR429. London: Department for Education and Skills.

Illeris, K. 2007. How We Learn. London: Routledge.

James, M., and R. McCormick. 2009. “Teachers Learning How to Learn”. Teaching and Teacher Education 25 82–973 :(7). doi: www.elsevier.com/locate/tate

Kidd, W., and J. Murray. 2013. “Using Emerging Technologies to Develop Professional Learning.” Professional Development in Education 167-165 :(2) 39. doi: http://dx.doi.org/19415257.2013.771087/10.1080

Kolb, D. 1984. Experiential Learning. New Jersey: Prentice Hall.

Lam, E. 2011. “Sharing Best Practices in Barbados and Trinidad and Tobago: Patterns of Policy Implementation and Resistance”. Compare: A Journal of Comparative and International Education 41–25 :(1) 41. doi: http://dx.doi.org/03057925.2010.530746/10.1080

Lawrence, C., and W.H. Chong. 2010. “Teacher Collaborative Learning through the Lesson Study: Identifying Pathways for Instructional Success in a Singapore High School”. Asia Pacific Education Review 72¬565 :(4) 11. doi: 10.1007/s3-9103-010-12564

Leahy, S., and D. Wiliam. 2011. “From Teachers to Schools: Scaling up Professional Development for Formative Assessment”. In J. Gardner, ed., Assessment and Learning, 2nd ed, 71–49. Thousand Oaks, CA: Sage.

Little, J.W. 1992. “The Black Box of Professional Community.” In A. Lieberman, ed., The Changing Contexts of Teaching, 78–157. Chicago: University of Chicago Press.

Lore, Arthur. 2011. “Perspectives on International Aid in Conflict Affected Countries”. Compare: A Journal of Comparative and International Education 702–699 :(5) 41. doi: http://dx.doi.org/03057925.2011/10.1080 .598019

Maringe , F, N. Foskett, and S. Woodfield. 2013. “Emerging Internationalisation Models in an Uneven Global Terrain: Findings from a Global Survey”. Compare: A Journal of Comparative and International Education 43 36–9 :(1). doi: http://dx.doi.org/03057925.2013.746548/10.1080

Marshall, B., and M. Drummond. 2006. “How Teachers Engage with AfL: Lessons from the Classroom.” Research Papers in Education 49–133 :(2) 21. doi: 444197/10.1086

McElhone, D., and T. Tilley. 2013. “Following the Teacher’s Lead in Professional Development to Improve Classroom Talk around Texts”. Action in Teacher Education 18–3 :(1) 35.

McNiff, J., and J. Whitehead. 2011. All You Need to Know about Action Research. London: Sage Publications.

Muijs, D., and D. Reynolds. 2001. Effective Teaching: Evidence and Practice. London: Paul Chapman.

Nance, B., M. Kambouri, and H. Mellar. 2007. Developing Teaching and Learning: Practitioner Guides: ICT. Leicester: NIACE.

Papastephanou, M., M. Christou, and Z. Gregoriou. 2013. “Globalisation, the Challenge of Educational Synchronisation and Teacher Education.” Globalisation, Societies and Education 84–61 :(1) 11. doi: http://dx.doi.org/14767724.2012.690311/10.1080

Pedder, J., M. James, and J. McBeath. 2005. "How Teachers Value and Practise Professional Learning." Research Papers in Education 43–209 :(3) 20.

Rodger, F. 2006. "The Ideal Mentor?" Professional Learning Today, Spring, 37–29.

Schechter, C. 2010. "Learning from Success as Leverage for a Professional Learning Community: Exploring an Alternative Perspective of School Improvement Process." Teachers College Record 224–182 :(1) 112.

Schön, D. 1991. The Reflective Practitioner: How Professionals Think in Action, 2nd ed. Aldershot: Arena (Ashgate).

Schwille, J., and M. Dembele. 2007. Global Perspectives on Teacher Learning: Improving Policy and Practice. Paris: UNESCO, International Institute for Educational Planning.

Sobhy, H. 2012. "The De-facto Privatization of Secondary Education in Egypt: A Study of Private Tutoring in Technical and General Schools." Compare: A Journal of Comparative and International Education 67–47 :(1) 42. doi: http://dx.doi.org/03057925.2011.629042/10.1080

Somekh, B. 2006. Action Research: A Methodology for Change and Development. Maidenhead: Open University Press.

Stoll, L., R. Bolam, A. McMahon, M. Wallace, and S. Thomas. 2006. "Professional Learning Communities: A Review of the Literature." Journal of Educational Change 58–221 :7.

Stoll, L., A. Harris, and G. Handscomb. 2012. Great Professional Development Which Leads to Great Pedagogy: Nine Claims from Research. London: National College for School Leadership.

Villegas-Reimers, E. 2003. "Teacher Professional Development: An International Review of the Literature." UNESCO.

Vrijnsen-de Corte, M., P. den Brok, M. Kamp, and T. Bergen. 2013. "Teacher Research in Dutch Professional Development Schools: Perceptions of the Actual and Preferred Situation in terms of the Context, Process and Outcomes of Research." European Journal of Teacher Education :(1) 36 23–3. doi: http://dx.doi.org/02619768.2012.662639/10.1080

Walsh, C., T. Power, M. Khatoon, S.K. Biswas, A.K. Paul, B.C. Sarkar, and M. Griffiths. 2013. "The 'Trainer in Your Pocket': Mobile Phones within a Teacher Continuing Professional Development Program in Bangladesh." Professional Development in Education 200–186 :(2) 39. doi: http://dx.doi.org/19415257.2013.766232/10.1080

Watkins, C. 2010. "Learning, Performance and Improvement." INSI Research Matters 15–1 :34.

Wells, G. 2000. "Dialogic Inquiry in Education: Building on the Legacy of Vygotsky." In C.D. Lee and P. Smagorinsky, eds., Vygotskian Perspectives on Literacy Research, 85–51. New York: Cambridge University Press.

White, E. 2013. "Exploring the Professional Development Needs of New Teacher Educators Situated Solely in School: Pedagogical Knowledge and Professional Identity." Professional Development in Education 98–82 :(1) 39. doi: http://dx.doi.org/19415257.2012.708667/10.1080

Wilkins, R. 2011. Research Engagement for School Development. London: Institute of Education.

SECTION IV.

ACTION RESEARCH:
RESEARCH AND BEST PRACTICE

School in Scotland

Defining Action Research

The initial baseline study for the TEMPUS project saw Action Research defined in many ways. Some aligned it with empirical research into the practice of the self or others; others held it to be multiple iterations of research by a practitioner into his/her own practice with accompanying review and reflection.

The idea of using research in a 'natural' setting to change the way that the researcher interacts with that setting can be traced back to Dewey, and Lewin in the 1930s. McFarland and Stansell (14 :1993) state that "Lewin is credited with coining the term 'Action Research' to describe work that did not separate the investigation from the action needed to solve the problem" (see also Reason and Bradbury, 2004). Thus the results of Action Research are intended to be applied to the research context. This is in contrast to traditional scientific research, which aims not to affect the object of the resarch but merely to research into it. Kemmis and McTaggart (560 :2003) identify a "family of Action Research" in which different orientations of the approach are analysed. These include two which are particularly relevant to this handbook and which may be summarised as:

- Participatory Action Research: in which the actors and objects of the research are involved together in an emancipatory frame. Thus for education this would involve members of university education faculties, teachers and other stakeholders (including students) taking an active part in the research and actions with the ultimate purpose of emancipatory progress of some form. Critical theory and Action Research are combined. Here, a commitment to social change, or to the power structures inherent in education systems, is implicit in the research objectives.

- Classroom Action Research, or pedagogical Action Research (see Norton, 2009), in which teachers carry out reflective enquiry to improve their practice and, by extension, the performance of their students.

(Kemmis and McTaggart, 560 :2003)

Inherent in this taxonomy is the concept of collaboration in Action Research, which is of particular importance to this TEMPUS project and its multiple stakeholders of universities, faculties and schools. Key also is the relationship between members of faculty and the teachers themselves and the precise locus of the research. Is it that the teachers are the researchers, in the true sense of Action Research, or is it the university staff who are leading it? Here are echoes of Macintyre's call of over thirty years ago for researchers and teachers to work together to "elucidate, examine, explain and extend teachers' working knowledge" (Macintyre, 1980 cited in Pollard, 1984).

Brydon-Miller et al. (2003) trace the many different origins of Action Research. At its heart, they claim, is the rejection of "the notion of an objective, value-free approach to knowledge generation in favour of an explicitly political, socially engaged, and democratic practice" (Brydon-Miller et al., 13 :2003). Through this, the researcher is at the centre of the practice and in control of the way in which research into it is undertaken. Pure Action Research in this sense overthrows the shackles of context and allows the researcher, in our context the teacher or teacher educator, to gain understanding of the situation they are working in. Of course, such contexts are not free from influence beyond the teacher – the school, the community it serves, the education system and its politics all act on the context and practice and thus skew and constrain the research (see Hammersley, 1993).

Somekh and Zeichner (2009) argue that the political, critical stance of Action Research is most prevalent at times of step changes in policy, often brought about by governmental prescription. Citing examples from Namibia, South Africa, Russia and post-Franco Spain, they explain Action Research's place in determining new ways of being for educationalists born out of a fundamental review of practice and its purposes. This is allied to the use of Action Research not just for professional development but for educational reform as well, which may be derived from responses to governmental diktat or through collaborative action with higher education in partnership with schools (Somekh and Zeichner, 2009).

What is clear, however, is that Action Research is fundamentally concerned with enquiry into ways of improving practice (Elliott, 1991; Sellwood and Twining, 2005). Perceptions of improvement are of course value-laden, according to the values of the researcher, and the aim of the research is to modify the very practice that is the object of the research. Whereas classic research may be classified as seeking new knowledge – finding out what is happening – the aim of Action Research is to apply that knowledge to practice to answer the question "How can I improve what is happening here?" (McNiff, Whitehead and Lomax, 1996). A further issue, which is pertinent here, is that emphasised by members of the self-study of a teacher and education practice (S-STEP) group who have moved away from Action Research, claiming that research, and the theory it generates, is not always needed to reflect on practice and improve it (McNiff and Whitehead, 2011).

Having been modified, through reflection and evaluation based on the findings, the context provides opportunity for further iterative research. This leads to the classic conceptualisation of Action Research as a cycle or spiral (Lewin, 1946; Elliott, 1991; Dick, 2002; McNiff and Whitehead, 2005; Carr, 2006; Lendahls Rosendahl and Rönnerman, 2006). Kemmis and McTaggart, 1988) conceptualise Action Research as a deliberate, solution-oriented investigation characterized by such spirals or cycles of problem identification, systematic data collection, reflection, analysis, data-driven action taken, and, finally, problem redefinition. For them it crucially aims at creating emancipatory change, either individually or institutionally. This individual change may result in teachers' improved self-efficacy and changes in perception of their own professional identity, as well as changes in their practice (Goodnough, 2011).

The number of stages in the cycle may vary but can be generally, and simplistically, summarised as Plan, Do, Review. In reality the research will probably start more formally at the review stage, where issues that lead to an enquiry are identified. Based on this, new practice is planned (e.g., the teaching of a particular topic in particular way) and this is then reviewed to inform the first cycle of Action Research. Sellwood and Twining (4 :2005) identify a number of sources of evidence that the teacher-as-researcher (Stenhouse, 1975) can use to inform this review.

- Notes and diary (staff and pupil)
- Lesson plans
- Classroom materials
- Students' work
- Observation
- Photography, audio-taping, video-taping
- Focus groups
- Interviews (staff and pupil)
- Questionnaires (attitude, opinions).

It is notable that many of these artefacts and sources are generated in the normal course of practice. For example lesson plans and students' work will exist whether or not the activity is being researched. This sets Action Research into the naturalistic sphere of research (Tomal, 2010), which in turn points to its limitations. It cannot lead to findings that are generalizable in the quantitative sense (although they can be widely 'relatable') and can normally only be applied to the situation or very similar situations in which the Action Research was undertaken (Sellwood and Twining, 2005). On the other hand, merely reflecting on practice does not constitute Action Research, which needs to have intention and structure (Cochran-Smith and Lytle, 1999).

Sellwood and Twining (2005), building on Zeichner (1994), argue that Action Research in educational institutions can involve a number of activities, which are categorised by different labels. These include:

- case studies based on a school, class or pupil/s
- school-based case study
- practitioner enquiry
- reflective practice
- evaluation
- professional development.

They identify potential purposes of such activity as including institutional improvement or institutional change (ibid.; Day, 2000). Key here is that those who are undertaking the research are practitioners, i.e., teachers or school leaders, and that such research, however it is framed, always includes reflection on their practice (Schön, 1984; Eraut, 1994). For Pring (2004), reflection on practice acts as the catalyst to Action Research and forms the 'review' phase of the cycle of iterations. The research then enriches and supports teachers' reflection.

Such practice may be that of an individual, a group (e.g., a department), or a whole institution and may often be indistinguishable from professional development, forming a valuable part of it (Sellwood and Twining, 2005). The impact of the research will fundamentally be on the context in which it was carried out (e.g., the practice of the teacher-researcher in their classroom) but through making the findings of the research public, this impact can permeate into the surrounding contexts. Indeed Pring (2004) argues that this publication of findings is an essential part of Action Research given its intention to change practice. This becomes possible through the 'relatability' of the research, given that many teachers face similar problems in many similar classrooms and schools.

Sellwood and Twining (2005) go further and describe a landscape for this impact that starts with the classroom and moves out to the wider educational community. Thus, they posit, Action Research can be seen to develop practice on a number of levels:

- Student development level – meeting the needs of a particular student or class
- Staff development level – contributing to individual CPD
- Group development level – developing the practice across year groups or subject departments in the same school
- Institutional development level – changing practice of management, leadership and policy
- Social or community development level – involving the wider community of parents and other stakeholders and influencing their behaviours in interacting with the institution, including in respect of out-of-school learning
- Wider educational community development level – through publishing findings.

By co-locating the research and the practice, the "difficulties in translating the knowledge generated by [academic] research into practice, at a later stage" can be avoided (Somekh, 31 :1993). As the researcher is also the practitioner, any new knowledge can immediately be applied back into the context of practice. As McNiff and Whitehead (4 :2005) put it, "Practice (what you do) informs theory (what you think about what you do), and theory (what you think) informs practice (what you are doing). Theory and practice transform continuously into each other in a seamless flow."

It may at first be that the domain of practice refers only to the classroom but Clarke's and Hollingsworth's (2002) use of this term is covered by several of Sellwood and Twining's levels above. Thus they regard practice as being enacted in many different professional arenas, such as the school and professional networks or associations. This resonates with the assertion of Wood (2007) who maintains that schools become places not only of learning but of deliberately designed research, which leads to co-constructed knowledge born from this research. Through researching together, teachers build learning communities or communities of practice (Wenger, 1998).

Orland-Barak and Becher (2011) see Action Research similarly as having different facets. In the context of their work in teacher education, they identify three major orientations in Action Research:

- a practical–professional orientation
- a critical–professional orientation
- a personal–professional orientation.

The first orientation is seen as a platform to assist teachers to understand their practice and usually to change it in line with particular policy or institutional requirements. This is the pragmatic setting for Action Research, which also carries a danger of bias or skewing, as the initial driver for the research may not come from the practice of the teacher-researcher themselves. Hammersley (1993) associates this with the control exerted by the hierarchical nature of schools. The pragmatic approach is balanced by the

potential for theorising in the Action Research, with the aim of changing pedagogic practice. This takes practitioners beyond the mere description record of their understanding to a deeper framework (Carr and Kemmis, 1986).

The second orientation more closely corresponds with the Action Research described in Brydon-Miller et al. (2003). Criticality here needs to be seen as having an object. Teacher-researchers may initially apply a critique to their context but this orientation assumes something much deeper. Here, Action Researchers are seen to be critical towards the research itself and to the extant literature. Their aims are likely to be emancipatory in the sense of improving social justice in some way.

The third orientation to Action Research "attends to the insights gained by the researcher as she or he engages in a critically reflective process before, during, and after a situation that she or he is facilitating and inquiring into" (Orland-Barak and Becher, 120 :2011). This research typically assumes a cyclical design involving recurring cycles of reflection on action that involve the researcher in "interpolating and extrapolating, judgment-making and assuming, doubting and affirming" (Peshkin, 5 :2000). Here, one can see most clearly the link between reflection, action and research described at the start of this review. It is, perhaps, the classic view of Action Research. In teacher education, however, Orland-Barak and Becher (2011) argue that all three orientations are in play together. This approach also suggests that all actors (education faculty researchers and teacher-researchers) need to participate in the cycles of planning, acting, observing and reflecting on our staff and teacher-students' teaching practices (Schön, 1983; Carr and Kemmis, 1983; Elliot, 1991; LaBoskey, 1994; McNiff et al., 2003).

Through teachers engaging in research as practitioners the divide between research and teaching is blurred, if not completely removed. This should overcome some of the issues suggested by Hammersley (1993), who highlights the dangers in research being an activity that is done on teachers rather than by them and which is in the domain of either academics or the educational system as a whole. Pine (2008) underlines this view and identifies the gap between teaching and research partly due to teachers perceiving the research as being detached from their realities but crucially because they are not actively involved in it. Through becoming participants in Action Research, driven by their own or institutional needs, he argues that teachers and teacher-educators can become, and are becoming, agents of educational change.

For further details on literature relating to Action Research, please see the APPENDIX I.

School in Stockholm

ACTION RESEARCH: EXAMPLES OF BEST PRACTICE

The Faculty of Education at the University of Saint Joseph in Beirut, Lebanon has a particular focus on the development of Action Research with the aim of enabling students to conduct studies to improve their professional practice. They identify four cases of Action Research carried out by their faculty staff since 2008 in collaboration with other partners:

1. Pre-professional clubs for eleven to fourteen young out-of-school people for basic education and for initiation in jobs, including awareness of civil and legal rights and psychological counselling.
2. Supporting students in difficulties through a personalised coaching programme to enhance self-esteem and to promote the professional identity of teachers involved in this innovation.
3. Multiple approaches to languages and cultures through team reflections on filmed practice and making explicit linkages between theory and practice to improve the class environment.
4. The socio-educational environment: helping the schools (6 private schools) to diagnose in three areas: school climate, educational practices and administrative problems and to develop relevant strategies.

EMERGING BENEFITS include:

a. Faculty members involved in the projects are better able to empathise with practitioners and to develop action plans that respond to contextual realities and professionals' needs.

b. Participating student teachers are able to link the theory espoused in their academic courses with real life situations.

c. Practitioners who participated in the projects similarly discovered their capacity to apply research methods and approaches to their professional contexts, and to see this context more widely through working with staff from other schools. This provided the opportunity to authentically add value to, and validate, best practice.

d. The Action Research approach enhanced practitioners' self-awareness and reflective skills, and their relationship with their taught knowledge and their students. It allowed them to revisit their professional identity and acquire a broader vision of their social mission.

e. The shared planning and execution of Action Research led to collaboration among colleagues and to a participative and democratic climate, which has been dramatically fostered in several schools.

f. Student attitudes to school improved and they discovered a real pleasure in expressing their thoughts and needs, and in being respected by their teachers and peers.

g. School leaders changed their perceptions towards the abilities of their staff and conducted structural changes after the end of the projects which institutionalized some of the best practices obtained through the research.

BEST PRACTICES include:

i. Involvement of faculty professors in shaping, implementing and evaluating the different phases of the project.

ii. Involvement of post-graduate students (master's and PhD), who use the research as a basis for a thesis on the same topic.

iii. Regular follow-up meetings between professors and research students to exchange experiences and receive feedback and orientations related to fieldwork and the preparation of their theses.

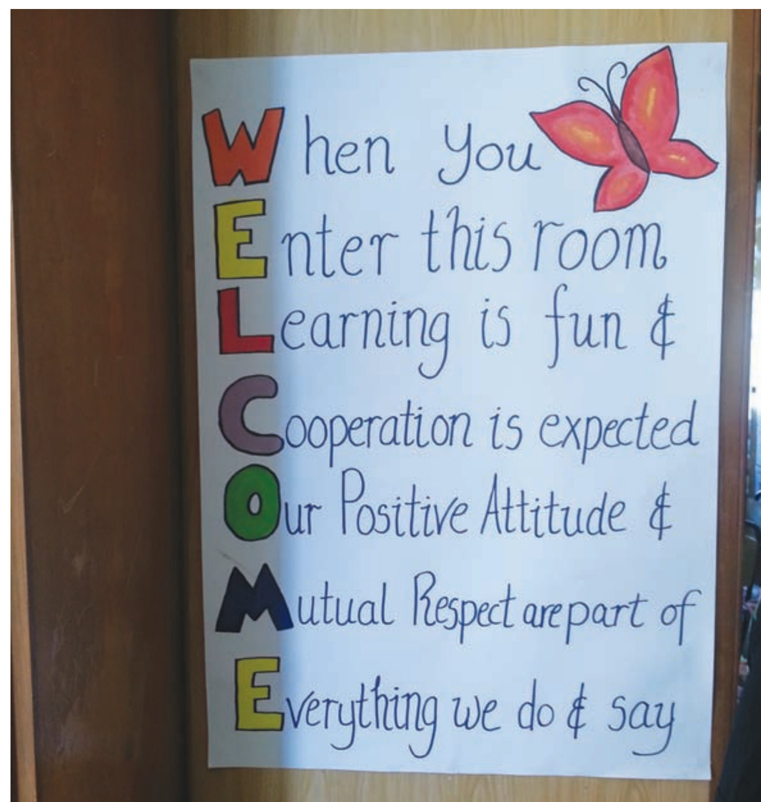
iv. The Faculty members organizing evaluation meetings with different professionals and students in the schools to reflect on the research.

v. Development of training workshops and exchange meetings to share conclusions and to prepare upcoming steps.

vi. The establishment of a university-level project that aims at creating a specific status for researchers.

USJ have restructured the Research Module to focus more on qualitative research in general, and on action-research in particular. In parallel research, master's students and their supervisors are encouraged to plan and lead action-research within professional contexts as bases for their theses. A consultative council of representatives of public and private schools has been created to enhance the quality of partnership between the faculty and the schools in several domains.

This is supported by dissemination activities which allow schools to become more aware of the Action Research's positive impact on practice and students' education.



School in Malta

ACTION RESEARCH: EXAMPLES OF BEST PRACTICE

Action Research in All Schools (ARAS): a long term vision

ARAS is a project initiated by the Middle East Institute for Higher Education (MEIHE) at the American University in Cairo, Egypt, with the vision of "creating Middle East and North Africa (MENA) knowledge around educational policy and practices, mainly based on collaborative and Action Research in education". This mission is partially enacted through agreements with the National Authority for Quality Assurance and Accreditation for Education (NAQAE) to initiate the ARAS, the Supreme Council of Universities and with the support of Save the Children and Ford Foundation in Egypt. In addition, several individual agreements with a number of faculties of Education were signed to train their graduate students on Action Research while supporting access to schools as the principal site of their research and action. Through ARAS, links with the Egyptian Ministry of Education and Ministry of Higher Education have been strengthened and allowed for close cooperation with faculties of education and government schools. Students at AUC's Graduate School of Education (GSE), as elsewhere in the country, have the opportunity to conduct Action Research at the school level as an integral part of their studies, e.g., for a master's degree, where they work in schools. Through adopting an Action Research approach it is claimed that there is more sustainability and empowerment of teachers through their active engagement in enquiry.

At the university's institutional level, ARAS is seen to be introducing a new tradition of research that is seen to sit well with the transformations taking place at this time. Thus it is focused on purposive research that will empower practitioner-researchers who strive for change and seek knowledge and understanding which can be applied rather than remain at the level of a theoretical construct. At the heart of this is the supply of new graduates to the teaching profession who will have the capability and capacity for individual and institutional transformation through Action Research approaches.

It is intended that educational practice at a school-level can be advanced through working with teachers in schools and providing them with tools of enquiry, reflection and research. This is seen as being extendable to other stakeholders to create learning or research communities involving teachers, students, parents, and other stakeholders.

ARAS is set out in three phases: Preparation, piloting and expansion

In the initial phase the network of faculties of education in Egyptian National Universities and the ministry of education is formed with graduate students from the faculties being selected based on defined criteria. In the second phase, graduate students are trained, as part of their Masters of Education, to conduct Action Research in schools. This research will be carried out in collaboration with teachers, students, local communities and school administrators and results in a thesis based on an assessment of the school, reflection on it, problem identification, and research and solutions which can then be fed back into the practice of the school.

While the ARAS project is a concentrated focus of AUC's development of Action Research in education, the MA programme in International and Comparative Education offers students the opportunity to develop their Action Research capabilities. This part of the MA taught programme will lead students into Action Research through self-reflective systematic inquiry by practitioners on their own practice. In this process, students are equipped with research tools that could be used to contribute to school renewal and instructional improvement. Students will also learn about four types of Action Research – collaborative, critical, classroom, and participatory (see Kemmis and McTaggart, 2003).

Assuit University, Egypt

Assuit University see Action Research as "a trend to conduct research on school related processes, methodologies and students' teaching and learning processes". They characterise this, in line with Sellwood and Twining (2005) as research that seeks to improve the level of students and the quality of their education: this could change the professional level of both the individual and the group. They identify Action Research as being at the nexus of theory and practice, representing a work in progress and producing knowledge that enables educator-researchers to become empowered in their professional development. Here, then, is clearly drawn the links between the three components of the CDFE project – Action Research, teacher CPD and Practicum.

ARAS identifies a number of strategic results:

1. A constructive partnership and synergy between the faculties of education and schools.
2. The development of capacity within the faculties of education with the focus on post-graduate studies.
3. A reinforcement of school reform.
4. Shaping strategies based on evidence to enhance the professional development of teachers.
5. Developing the professional and academic skills of teachers.

In Assuit, current and future developments include:

a. Developing a plan of expansion of the faculty's facilities with respect to classrooms and laboratories to deal with the growth in postgraduate studies.
b. Participating in the preparation of training programs that contribute to the development of the professional performance of teachers.
c. Identifying training abilities for teachers through studies, research and questionnaires and diagnosing their needs.
d. Developing a system of teacher assessment using different methods and tools.
e. Developing collaborative links between faculty and the Department of Education and other institutions.
f. Participating actively in further Action Research cycles in schools.
g. Producing a magazine or newsletter to disseminate Action Research findings.
h. Orientating postgraduate students towards Action Research.

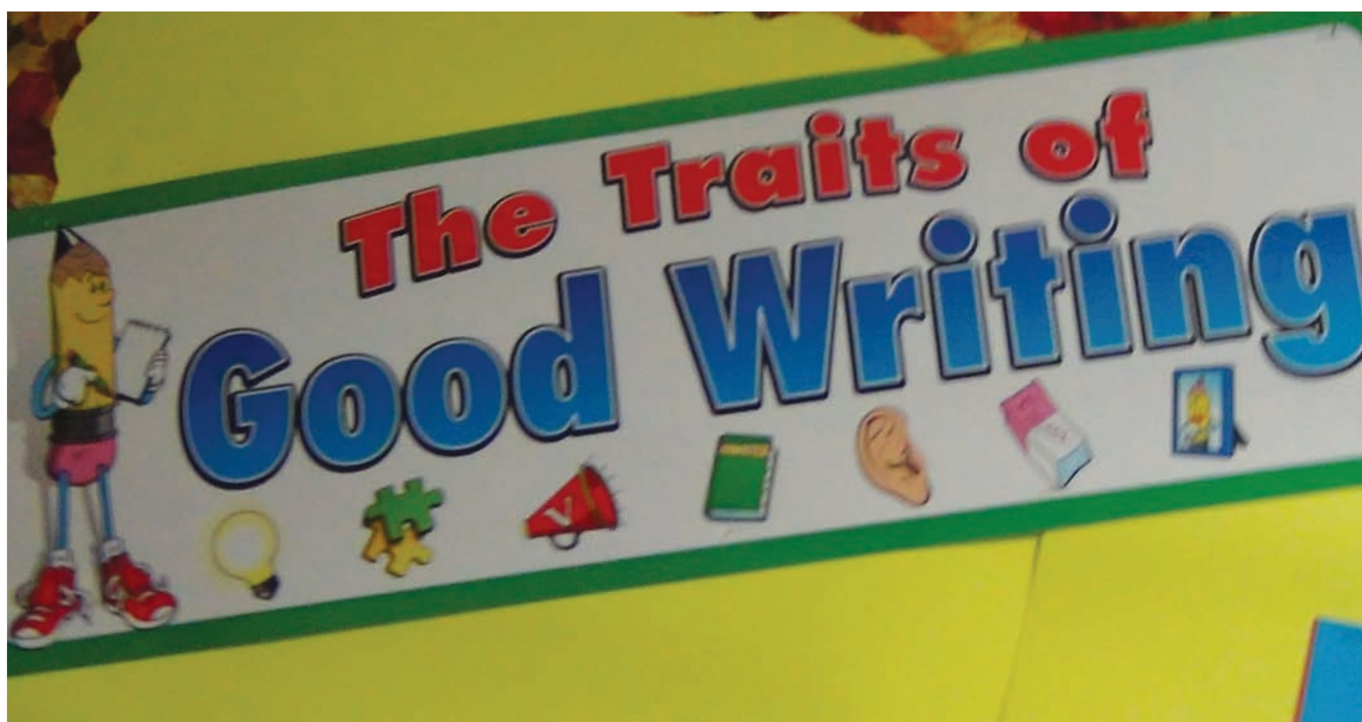
Partnership in Action Research: Examples

While universities may have a long tradition of research this does not always include research into practice. Further, when working with schools, faculty are often researching into the practice of teachers, or at best researching with them. This section of the handbook looks at Action Research into the practice of teachers and, assuming the more conventional definitions of Action Research (see above), this implies that teachers themselves are involved. But teachers may not be, indeed often are not, experienced in research. Thus a partnership approach can be used to develop this capability with university staff working alongside teachers to develop the latter's research into their own practice.

ACTION RESEARCH PARTNERSHIPS BETWEEN UNIVERSITIES AND SCHOOLS: some recommendations

For maximum effect, faculty:

1. Map the framework of CPD at national and local levels, identifying where AR may be a means to implementation.
2. Identify the extent to which members of faculty undertake AR themselves and how that is provided for in terms of processes for planning, undertaking and reviewing the research.
3. Identify the extent to which schools in the partnership use AR, or AR approaches, as part of CPD.
4. Identify key schools, if any, in the partnership that have a clear policy for the use of AR or AR approaches.
5. Explore ways of sharing this policy and practice with other schools and use it to inform the partnership policy for AR and CPD.



School in Lebanon

Theme 1: Action research as CPD

One of the key tenets of Action Research is the way in which the outcomes are used to provide insights for the researcher into his or her own practice. This reflexive nature of the research is designed into the research – from the questions being asked to the data collected and the analysis of it. A meta-research question essential to any kind of Action Research is always – "And what does this tell me about my practice and what are the implications?". In seeking, and gaining answers, to this over-arching question the Action Researchers – here teachers or faculty – will naturally be engaging in a form of professional development. Indeed the work of the SUPI project outlined above (see Section III) sets such research in the CPD arena and, in many schools, the person responsible for CPD will also be charged to develop the capacity of staff to engage in Action Research. This has implications not just for the nature of professional development, but also for the way in which partnerships develop their emphases and structures. These issues are considered here.

ISSUES FOR POLICYMAKERS

Teachers' Continuing Professional Development (CPD) is represented in policies at national, regional and school level in both formal and informal terms. There are many definitions of what constitutes CPD, the form it takes and the purposes to which it is put. Action Research (AR) may be seen as a means of shaping CPD, or as a vehicle for enacting it.

Formally, it can be a requirement that teachers undergo a prescribed amount of Continuing Professional Development either for the purposes of licensing (i.e., maintaining professional status as a qualified teacher), for promotion or for performance review. AR is often a lengthy activity that means that it will need to be carefully scheduled to fit in with other calendars, e.g., annual appraisals.

At a national level, governments may have policies about the way in which teachers undertake CPD, how it is used to regulate the profession and career development and how it should be recorded, monitored and evaluated. There may be governmental agencies or NGOs that support the rollout of these policies.

At a local level, school districts or authorities may have policies for the implementation and support of CPD. These will mediate the national approach and address local issues (for example teachers in rural areas may have different CPD needs to those in urban ones). Each school will then have policies for the implementation of CPD that will draw on national approaches, and regional or district ones where they exist, and tailor them to meet the needs of the school in question and the set of staff working there at the time. Action Research projects will be drawn up so that they allow teachers and faculty to enquire into identified issues.

AR in the formal sense, as defined by the literature, implies the systematic planning, undertaking and reviewing of research carried out by the practitioner (i.e., a teacher) into his or her own practice and that such research is carried out iteratively with the finds of the first cycle feeding into the planning of the second and so on. Less formally, the reflection on practice of a teacher, or the trying out of new ideas and noting their impact may also be seen to be 'AR approaches'.

Universities and schools working in partnership for AR will need to work within these frameworks while also drawing on the needs of academic qualifications or research objectives (see below).

It could be a challenge for some schools to allow individual teachers to select the aspect of their own practice to research as this could conflict with school plans and priorities.

ISSUES FOR UNIVERSITIES AND SCHOOLS

What are the requirements of CPD frameworks and how might Action Research approaches help address them?

How can Action Research be linked to specific school improvement plans and policy initiatives?

Is there a mutually understood definition of what constitutes Action Research? Among faculty? Across departments or subject areas of the university? Among the schools in the partnership?

How consistent is the approach to Action Research across the schools in the partnership?

In working in partnership is it clear who is carrying out the Action Research? Given that Action Research implies an impact on practice, whose practice is being impacted?

If a member of university faculty carries out research in or with a school that impacts on the professional development of teachers, is this really Action Research?

How might teachers be empowered to become "agents of change" through CPD and associated research?

How might Action Research be seen to be transformational?

School in Lebanon

Theme 1: Examples of action research as professional development

Action Research and Continuing Professional Development in an inner city secondary school, London, UK

This school, near the centre of London, has nearly 1,200 students aged between eleven and eighteen. It serves a very mixed area in terms of cultures, languages and ethnicities and was founded under the government's 'academy' scheme, replacing a previous school on the same site. As part of this scheme the school was rebuilt and has gone from being one which was underperforming to one of the highest performing schools in the country, being in the top quintile in mathematics, English and science when compared to similar schools.

It is part of an 'academy chain', a network of schools that share elements of management and other services. A particular feature of this chain, the largest in England, is its national spread and the fact that it contains both primary and secondary schools in urban and rural settings. Equally significant, especially for the purposes of this vignette, is the way in which Action Research is embedded in processes of teacher professional development.

The academy chain conceptualises teacher development in four phases – pre-service, initial in-service and Action Research. The pre-service phase is for trainee teachers whose professional formation is undertaken in the school, with a placement in a contrasting school in the chain. This is carried out with support from a university reflecting the current model of initial teacher education in England. On qualifying as a teacher, many trainees are employed in schools in the chain. In this case they join the second phase of teacher development, which acts as an induction year. This induction is also followed by teachers who come to the school (or chain) from other posts. Newly qualified teachers also take the third phase of teacher development, which looks at developing their professional identity and capabilities. This phase is not followed by teachers who have experience elsewhere.

The fourth phase is aimed at teachers with at least two years of experience, and who have completed the one or two years of post-qualifying CPD outlined above. It takes the form of practitioner Action Research with teachers undertaking enquiry into aspects of their teaching or of the school more widely, depending on their role. This phase is led by a named teacher, who also has subject leader responsibility, and is organised in clusters to provide peer support. These clusters meet every half term approximately to share plans, approaches and emergent findings. Issues of ethics are covered through school policies. Informed consent of parents and students to allow for research by teachers is secured.

Outputs from the enquiry are shared amongst colleagues in the school and across the chain at professional development events and may be published in the chain's CPD publication or at other dissemination events. The enquiries may be single-cycle practitioner enquiries or iterative – as in the more commonly accepted definition of Action Research. Teachers may use these experiences and enquiries to work towards a master's degree but this is not essential.

Implications for Faculties of Education: As the programme becomes embedded, teachers become very familiar with processes of practitioner enquiry in their classroom. They also engage in activity which can be mapped onto traditional Action Research methodologies. Universities recruiting master's or doctoral students from such settings can benefit from their greater understanding and experience. Such settings also provide opportunities for collaborative research and publication. FoEs can help such schools in connecting with academic communities.

Theme 2: Action Research leading to academic qualifications: example

It can be assumed that those engaged in Action Research will initially do so in order to answer a question that has arisen as a result of their practice. The traditional Action Research spiral will start with a review of practice (this may be very informal or it may be as part of some other process such as an annual appraisal or the analysis of data from examinations), which then leads on to the formulation of research questions. The aim of the research is to enquire into those questions with a view to obtaining a clearer understanding of the situation and pointers for possible changes in practice. All of these stages may be rather inward looking and are undertaken for their own sake and for the purposes of informing professional practice with, as noted above, an element of CPD being a natural outcome.

On the other hand Action Research can be linked to external frameworks. At one level this may be annual review or promotion systems, with data and analysis tied to the objectives defined therein. A teacher may identify a problem or situation in their annual review, or when approaching promotion, develop some actions that are based on research and act on it. The analysis is then presented as evidence in the review or for promotion. Such an approach can also be used with external qualifications. Doctoral research is bound up with the development of beginning academics and leads to the formal qualification of PhD, EdD or the equivalent. In the same way, teachers can research into their own practice but tailor this research to also meet the needs of an external qualification such as a master's in education. This section examines the issues that arise in this melding of two aims for research and how they may be tackled.

ACTION RESEARCH: QUESTIONS FOR FACULITES OF EDUCATION

Academic qualifications are generally required for teaching, although this is not universally the case. For example in England it is possible for some schools to appoint unqualified teachers. 'Unqualified' in this context may mean 'qualified for another profession' or 'having a general academic qualification'. So, for example, an 'unqualified' teacher of science may have a BSc or higher qualifications in science, or may have professional qualifications, but does not have a teaching, or pedagogic/education qualification.

Postgraduate qualifications in education are not universally recognised, in a formal sense, as a necessary step in promotion or career progression. They may be used informally to enhance CVs without being a requirement to teach. In other contexts and countries teachers who gain master's level qualifications in education may be guaranteed promotion or pay increases. In yet other contexts there is a requirement for those in leadership roles to have such qualifications.

In some contexts it is necessary for teachers to gain undergraduate qualifications in education (the pedagogical science) in order to teach. In others, a BA or BSc in subject discipline is sufficient, topped up with a course of teacher training.

Increasingly, courses of initial teacher education (or training) require students to undertake small-scale research or enquiry into their own practice or that of others. In postgraduate qualifications this need is more central and is accompanied by components of learning about research approaches.

Action Research, or elements of it, can provide one mechanism by which such research is undertaken as part of academic qualifications.

ACTION RESEARCH: EFFECTIVE STRATEGIES FOR UNIVERSITY FACULTIES OF EDUCATION

1. Build research into programmes of teacher training and involve staff from partner schools in this aspect of provision (as with others).
2. Map the requirements of research in academic qualifications to the needs of schools, through a collaborative audit.
3. Work with schools to develop cohorts of teachers engaged in Action Research.
4. Allow for mixed programmes in such cohorts, with some teachers pursuing academic qualifications and others engaged in smaller scale, or longer term classroom based enquiry.
5. Develop qualifications with schools to respond to their own needs. For example, develop modules that arise from particular school or national initiatives.

QUESTIONS FOR POLICYMAKERS

What are the requirements of academic qualifications for teachers (undergraduate, postgraduate, doctoral) and how might Action Research approaches help fulfil them?

Is there a mutually understood definition of what constitutes Action Research? Among faculty? Across departments or subject areas of the university? Among the schools in the partnership?

Are schools supportive of the academic qualification or are their needs for research and enquiry more driven by pragmatic concerns?

To what extent is Action Research undertaken as part of an academic qualification located in that qualification and to what extent can it be located in the school setting? Are there tensions between the two in terms of timescale, independence of study or objectives? In other words, does the school provide an agenda that is complementary to that of the academic qualification or may the latter impose other constraints such as the need to complete the research in a given time, or to adopt a critical approach that may undermine the school?

If the practice of a teacher undertaking research as part of an academic qualification is impacted on by that research, how might that affect the school/university partnership?

School in Lebanon

ACTION RESEARCH: EXAMPLES OF BEST PRACTICE

Peer observation Action Research at a primary school, leading to qualification

This school is newly established and situated in Milton Keynes. It services mixed races but mostly the children of highly skilled immigrants. This is an expanding school that believes that Action Research enables them to find the best way to accelerate pupil progress. They also see it as part of their professional development. They term their research 'peer observation Action Research'. This Action Research focuses on specific individual students to improve their performance. This school is very eager to explore opportunities to carry out Action Research towards an Open University (i.e., online) qualification.

How they use Action Research in their school

They use teams of three practitioners (teachers) to carry out a specific project. This allows for quality learning dialogue, team support and the sharing of ideas and experience. To do this, they use a form called 'Record of Research' to keep record of their Action Research project.

After identifying a problem, they come up with a hypothesis about how using theory-based strategies to support the teaching and writing will result in improved pupil progress. To verify this hypothesis they follow the following Action Research cycle during six weeks of their exploration:

Stage1-: Identify a learner for the Action Research

At first, teachers identify a learner in his/her class who has not made adequate progress in the last term or is not making the progress that the learner should.

Stage2-: Identify the theory and strategies

The teacher meets with his/her team and then shares and discusses information about the learner, i.e., who s/he is, what are their needs and how they could be met. Then they use what they term as a 'theory meets practice research sheet' to identify which theory might be helpful to use for making things easier for the learner under discussion and why. Then they identify the strategies which will help to support their learner.

Stage3-: Plan the process of data collection

As a result of planning the strategies to be adopted in their practice and investigation, each teacher must decide how he or she is going to observe the planned changes and measure the impact. For triangulation of the generated data, he or she might use the following methods/techniques:

Observation notes
Involvement scales
Well-being scales
Video recording
Interview with learners
Environment review

Each teacher (researcher) on the team should have an understanding of the data collection methods, when their classroom environment will be visited, and how the data will be collected. A detailed timetable should be drawn up and shared amongst the team members.

Stage4-: Data collection

Each researcher visits the others' classrooms to collect their data. They do it by using their Physical Education lesson slot (when a sports professional takes over) and they will complete all documentation during that time slot.

Stage5-: Measure and review the impact

After collecting data, teachers start to triangulate what has been observed. They use learner progress data as part of their review process. Then finally they review the hypothesis and consider their recommendations or identify questions for further exploration.

School in UK

Theme 3. Action Research as a means of developing partnerships: examples

This theme relates closely to Theme 1 and looks at the ways in which the use of Action Research may lead to a closer relationship between university and school partners. Again the SUPI work outlined above in Section III addresses this area of development. As teachers become more expert in, and used to, Action Research approaches, their role vis à vis the university changes. No longer is the faculty member the expert who is mentoring the teacher. As the number of such expert teacher researchers increases, so, a community may develop to which the university faculty may also belong. The partnership becomes less hierarchical and more mutual.

ACTION RESEARCH: CHALLENGES FOR UNIVERSITIES AND SCHOOLS

Universities offering initial teacher education are required to work in partnership with schools for Practicum purposes. This may have an Action Research or enquiry-based element but it does not necessarily do so.

Universities offering postgraduate programmes include research as an element of these programmes. This may include Action Research but does not necessarily do so. More traditional methodologies may be preferred in which the researcher is more detached from that which is being researched. For example, a teacher may conduct research in topics other than his or her own practice.

Schools are able to offer their own training and research opportunities without the partnership of a university. Teachers undergoing research may be grouped to provide peer support.

Schools may partner with each other or be in federated management groupings (school clusters) that allow for the cross-fertilization of ideas in so far as Action Research is concerned.

The particular research interest of the FoE or individual members may not match that of the schools, or there may not be sites that are suitable for the research.

ACTION RESEARCH: QUESTIONS FOR UNIVERSITIES AND SCHOOLS

What are the roles of those who make up the partnership between university and school and are these clearly defined? For example, are teachers seen as peer researchers or is there an expectation of mentoring?

How do the schools make use of the university's experience in research and to what extent is this in the domain of Action Research?

How do the members of the partnership – both at the individual and institutional level – communicate the intentions, process and outcomes of their research to one another?

How does the Action Research element of the partnership impinge on arrangements for Practicum and initial teacher education and for CPD? Things to consider here might include the ways in which teachers' own Action Research is included in programmes of teacher education; the use of data and findings in portfolios of evidence as used in assessing outcomes of teacher education or CPD programmes; and the ways in which such programmes explicitly teach and/or require Action Research to be used.

Addressing Challenges

One of the key requirements of any effective partnership is to develop approaches to communication and to establishing a community of peers. The word 'partnership' implies working together, with some equality between partners. In respect of Action Research a first step is to audit, in the broadest sense of the word, the ways in which such research is being used in the partner institutions. This includes universities where, perhaps, faculty use other types of research predominantly and schools where, perhaps, teachers do not categorise what they are doing as research. Once a shared understanding of what is being done is established then it can be used to develop the partnership.

Communication of Action Research outcomes can be an explicit activity or one that is implicit in other processes. Thus the university may build Action Research by teachers into its programmes of professional development and include reflective enquiry in initial teacher education practices. Here are implicit ways of communicating or sharing the outcomes of teacher Action Research.

More explicit approaches are to produce a journal of Action Research with articles from teachers and to have events that focus on Action Research and its dissemination. This might overcome any problems associated with getting published in existing academic journals and provide teachers with a platform to develop their publication strategies.

Faculty should be seen to be undertaking Action Research as well. There is a danger that if academics at the university only engage in other types of research then Action Research is devalued. This devaluing was noted by some members of the TEMPUS partnership in baseline reports.

Indications for Policymakers

- Formally, it ought to be a requirement that teachers undergo a prescribed amount of CPD either for the purposes of licensing (i.e., maintaining professional status as a qualified teacher), for promotion or for performance review. AR is one ideal form of CPD but is often a lengthy activity that means that it will need to be carefully scheduled to fit into other calendars, e.g., annual appraisals.

- At a national level, governments could have policies about the way in which teachers undertake CPD, including practising AR, how this is used to regulate the profession and career development and how it should be recorded, monitored and evaluated. There may be governmental agencies or NGOs that support the rollout of these policies.

- Universities and schools working in partnership for AR will need to work within these frameworks while also drawing on the needs of academic qualifications or research objectives (see below).

Governments should also consider the following measures:

- There is a need to increase publications related to these action-research projects in international scientific journals that provide recognition to those conducting Action Research.

- There is a need to build networks with European and North American researchers in order to share practices and knowledge, both within universities and within the ministry of education.

- Faculties of Education and ministerial training bodies could include teachers in its seminars – as an audience but also as speakers. Any online portals, blogs, forums, and so on, could be opened to teachers or, if necessary, new ones could be established.

- Require research as part of programmes of teacher training and involve staff from partner schools in this aspect of provision (as with others).

- Work with schools to develop cohorts of teachers engaged in Action Research.

- Encourage the development of qualifications with schools to respond to their own needs. For example, encourage the development of modules that arise from particular school or national initiatives.

- Postgraduate qualifications in education ought to be recognised, in a formal sense, as a necessary step in promotion or career progression.

School in Scotland

BIBLIOGRPAHY

Adamson, B., and E. Walker. 2011. "Messy Collaboration: Learning from a Learning Study". Teaching and Teacher Education 27 (1): 29–36.

Ainscow, M. 2005. "Developing Inclusive Education Systems: What are the Levers for Change?" Journal of Educational Change 2005 (6): 109–24.

Barrett, A., M. Crossley, and H. Dachi. 2011. International Collaboration and Research Capacity Building: Learning from the EdQual Experience". Comparative Education 47 (1): 25–43.

Bradshaw, P., P. Twining, and C. Walsh. 2012. "The Vital Program: Transforming ICT Professional Development". American Journal of Distance Education 26 (2): 74–85.

Brydon-Miller, M., D. Greenwood, and P. Maguire. 2003. "Why Action Research?" Editorial, Action Research 1 (1): 9–28.

Carr, W. 2006. "Philosophy, Methodology and Action Research". Journal of Philosophy of Education, 40 (4).

Carr, W., and S. Kemmis. 1983. Becoming Critical: Education Knowledge and Action Research. Lewes: Falmer Press.

Chen, Y-M. 2012. "A Socio-Cultural Approach toward EFL Teacher Education in Taiwan". Procedia – Social and Behavioral Sciences 55 (5): 435–44.

Clarke, D. and H. Hollingsworth. 2002. "Elaborating a Model of Teacher Professional Growth". Teaching and Teacher Education 18:947–67.

Cochran-Smith, M., and S. Lytle. 1999. The Teacher Research Movement: A Decade Later". Educational Researcher 28 (7).

Cornelissen, F., J. van Swet, D. Beijaard, and T. Bergen. 2011. Aspects of school–university research networks that play a role in developing, sharing and using knowledge based on teacher research". Teaching and Teacher Education 27 (1): 147–56.

Day, C. 2000. "Teachers in the Twenty-first Century: Time to Renew the Vision". Teachers and Teaching: Theory and Practice 6 (1): 101–15.

Eilks, I., and S. Markic. 2011. "Effects of a Long-Term Participatory Action Research Project on Science Teachers' Professional Development Eurasia Journal of Mathematics". Science & Technology Education 7 (3): 149–60.

Elliot, J. 1991. Action Research for Educational Change. Buckingham: Open University Press.

Eraut, M. 1994. Developing Professional Knoweldge and Competence. Lewes: Falmer Press.

Gall, J., M. Gall, and W. Borg. 2005. "Action Research". In A. Burvikovs, ed., Applying Educational Research: a Practical Guide, 487–522. Boston: Pearson Education.

Genor, M. 2005. "A Social Reconstructionist Framework for Reflection: The "Problematizing" of Teaching." Issues in Teacher Education 14 (2): 45–62.

Goodnough, K. 2011. Examining the Long-term Impact of Collaborative

Action Research on Teacher Identity and Practice: The Perceptions of K–12 Teachers". Educational Action Research 19 (1): 73–86.

Guskey, T. (2000), Evaluating Professional Development. Thousand Oaks, CA: Corwin Press.

Guzey, S., and G. Roehrig. 2009. Teaching Science with Technology: Case Studies of Science Teachers' Development of Technology, Pedagogy, and Content Knowledge". Contemporary Issues in Technology and Teacher Education 9(1): 25–45.

Halai, N. 2011. "How Teachers become Action Researchers in Pakistan: Emerging Patterns from a Qualitative Metasynthesis". Educational Action Research 19 (2): 201–14.

Hammersley, M. 1993. "On the Teacher as Researcher". In M. Hammersley, ed., Educational Research: Current Issues. London: P. Chapman.

Hume, A., and A. Berry. 2010. "Constructing CoRes – a Strategy for Building PCK in Pre-service Science Teacher Education". Research in Science Education 41 (3): 341–55.

Jovanovic, J., D. Houston, and C. Ohly. 2012. "'That's Not an Essay!': Designing & Implementing 'Bendy Assessment' that Puts the Personal in the Professional" Australian Teacher Education Association [online], http://www.atea.edu.au/ConfPapers/2012/Peer%20Reviewed/ATEA_Jessie%20Jovanovic.docx accessed 3113/3/

Jurdak, M., and S. BouJaoude. 2011. The Impact of Collaborative Action Research on Inquiry Skills, Habits of Mind, and Orientations toward Collaborative Action Research and Collaboration: The Case of a School-based Project in an Arab Context. The TAMAM project [online], http://www.tamamproject.org/documentation/publications/tamam_technical_report_1.pdf

Kambouri, M. 2003. "ICT And Adult Literacy and Numeracy: Observing Practice". Basic Skills Bulletin 19.

Kambouri, M., H. Mellar, and K. Logan. 2006. "Adult Learners and ICT: An Intervention Study in the UK". In W. Nejdl and K. Tochtermann, eds., EC-TEL, 2006, LNCS 4227. Book Series: Lecture Notes in Computer Science. Berlin: Springer.

Kemmis, S., and R. McTaggart. 1988. The Action Research Reader, 3rd ed. Melbourne: Deakin University Press.

Kemmis, S., and R. McTaggart. 2003. "Participatory Action Research," In N.K. Denzin and Y.S. Lincoln, eds., Handbook of Qualitative Research, 3rd ed., 559–604. Thousand Oaks CA: Sage.

LaBoskey, V. 1994. Development of Reflective Practice: A Study of Pre-Service Teachers. New York: Teachers College Press.

Le Cornu, R., and R. Ewing. 2008. "Reconceptualising Professional Experiences in Pre-Service Teacher Education . . . Reconstructing the Past to Embrace the Future." Teaching and Teacher Education 24 (7): 1799–1812.

Lendahls Rosendahl, B. and K. Rönnerman. 2006. "Facilitating School Improvement: The Problematic Relationship between Researchers and Practitioners". Journal of In-service Education 32 (4).

McFarland, K., and J. Stansell. 1993. "Historical Perspectives". In L. Patterson, C. Santa, K. Short, and K. Smith, eds., Teachers are Researchers: Reflection and Action, 12–18. Newark, DE: International Reading Association.

McNiff, J., and J. Whitehead. 2005. Action Research for Teachers: A Practical Guide, Abingdon, UK: David Fulton.

McNiff, J., P. Lomax, and J. Whitehead, J. 2003. You and Your Action Research Project, 2nd ed. London: Routledge.

McNiff, J., P. Lomax, P., and J. Whitehead, J. 2011. All You Need to Know about Action Research, 2nd ed. London: Routledge.

Mogra, I. 2012. "Role Play in Teacher Education: Is There Still a Place For It?" TEAN Journal 4 (3), http://bit.ly/YCbBmy accessed 3113/3/

Muijs, D., and A. Harris. 2003. "Teacher Leadership – Improvement through Empowerment?: An Overview of the Literature". Educational Management, Administration and Leadership 31.

Norton, L. 2009. Action Research in Teaching and Learning. A Practical Guide to Conducting Pedagogical Research in Universities. Abingdon, UK: Routledge.

Orland-Barak, L., and A. Becher. 2011. "Cycles of Action through Systems of Activity: Examining an Action Research Model through the Lens of Activity Theory." Special issue. Mind, Culture, and Activity 18 (2): 115–28.

Ono, Y., and J. Ferreira. 2010. "A Case Study of Continuing Teacher Professional Development through Lesson Study in South Africa". South African Journal of Education 30: 59–74.

Peshkin, A. 2000. "The Nature of Interpretation in Qualitative Research". Educational Researcher 29 (9): 5–10.

Pine, G. 2008. Teacher Action Research: Building Knowledge Democracies. Sage: London.

Pollard, A. 1984. "Ethnography and Social Policy for Classroom Practice". In L. Barton and S. Walker, eds., Social Crisis and Educational Research. London: Croom Helm.

Pring, R. 2004. Philosophy of Educational Research. London: Continuum.

Reis-Jorge, J. 2007. "Teachers' Conceptions of Teacher-Research and Self-Perceptions as Enquiring Practitioners – A Longitudinal Case Study". Teaching and Teacher Education 23 (4): 402–17.

Sales, A., J. Traver, and R. García. 2011. "Action Research as a School-Based Strategy in Intercultural Professional Development for Teachers". Teaching and Teacher Education 27 (5): 911–19.

Schön, D. 1983. The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books.

Sela, O., and M. Harel. 2012. "The Role of Teacher Education in Introducing Action Research into the Education System: A Case Study of An Education College". Current Issues in Education 15 (2), http://cie.asu.edu/ojs/index.php/ cieatasu/article/view/897 accessed 3113/3/

Sellwood, I. and P. Twining. 2005. Action Research. Coventry: Becta

Somekh, B. 1993. "Quality in Educational Research: The Contribution of Classroom Teachers". In J. Edge and K. Richards, eds., Teachers Develop Teacher Research. Oxford: Heinemann.

Somekh, B., and K. Zeichner. 2009. "Action Research for Educational Reform: Remodelling Action Research Theories and Practices in Local Contexts". Educational Action Research 17 (1): 5–21.

Soprano, K., and L-L. Yang. 2012. "Inquiring into My Science Teaching through Action Research: A Case Study on One Pre-Service Teacher's Inquiry-Based Science Teaching and Self-Efficacy". International Journal of Science and Mathematics Education, December. doi: 10.1007/s10763-9380--012x accessed 3113/3/.

Stenhouse L. 1975. An Introduction to Curriculum Research and Development. London: Heinemann.

Taha, V. 2012. "The Effects of Using the Jigsaw Method in Teaching Science on Student and Teacher Learning: A Self-Study". Unpublished masters' thesis, Birzeit University.

Tomal, D. 2010. Action Research for Educators. Plymouth, UK: Rowman & Littlefield Education.

Tsafos, V. 2010. "Developing a Practice-Theory Model in Pre-Service Teacher Education in Greece: The Implications of Action-Research: A Case Study". Action Research 8: 153–70.

Vaino, K., J. Holbrook, and M. Rannikmäe. 2013. "A Case Study Examining Change in Teacher Beliefs Through Collaborative Action Research". International Journal of Science Education 35 (1).

Wenger, E. 1998. Communities of Practice: Learning, Meaning, and Identity. Cambridge: Cambridge University Press.

Williams, J., C. Eames, A. Hume, and J. Lockley. 2012. “Promoting Pedagogical Content Knowledge Development for Early Career Secondary Teachers in Science and Technology Using Content Representations”. Research in Science & Technological Education 30 (3): 327–43.

Wood, D. 2007. “Professional Learning Communities: Teachers, Knowledge, and Knowing”. Theory into Practice 46 (4).

Wyatt, M., and E. Arnold. 2012. “Video-Stimulated Recall for Mentoring in Omani Schools”. International Journal of Mentoring and Coaching in Education 1 (3): 218–34.

Xu, Y. 2009. “School-Based Teacher Development through a School–University Collaborative Project: A Case Study of a Recent Initiative in China”. Journal of Curriculum Studies 41 (1): 49–66.

Zeichner, K. 1994. “Research on Teacher Thinking and Different Views of Reflective Practice in Teaching and Teacher Education”. In I. Carlgren, G. Handal, and S. Vaage, eds., Teacher Minds and Actions: Research on Teachers’ Thinking and Practice, 9–27. London: Falmer Press.

Zeichner. K. 2010. “Rethinking the Connections between Campus Courses and Field Experiences in College- and University-Based Teacher Education”. Journal of Teacher Education, 61–89.

SECTION V. SUMMARY OF INDICATIONS FOR POLICYMAKERS

SECTION V.

SUMMARY OF INDICATIONS FOR POLICYMAKERS

School in UK

We aspire that this TEMPUS project encourage policymakers to take specific steps towards improving the teaching profession in their countries.

We suggest in this handbook that the work of teachers can be greatly enhanced using a three-pronged approach which addresses Practicum, Continuing Professional Development and Action Research simultaneously. We propose that, for maximum improvement to education, all three strands need to be developed and supported by ministries of education.

This development and support depends on economic and structural actions, but also on improvements to relationships among policymakers, university faculties of education and schools in any one country and potentially across national boundaries.

In order to develop strong partnerships across universities and schools, the following points are key:

- Establish partnerships between universities and schools using contracts. Make sure both sides are clear of their entitlements and obligations, especially through the use of intermediate process targets/outcomes.
- Establish partnerships with schools that are already strong in providing CPD to their experienced teachers.
- Faculties of Education commit to wider partnership activities with schools: they sustain tutor visits to schools and share observations of student teachers with school teachers.
- Practice-based and practice-sensitive research can be carried out collaboratively by teachers, teacher educators and researchers. This type of research is the link between 'theory' and practical action in classrooms.

The following is a summary of the suggestions for policymakers that arise from this project in relation to the three strands.

Policymakers need to facilitate Education Faculties and schools in implementing the following measures to improve initial teacher education:

- Work with FoEs to increase the requirements and provisions for student teachers to spend more time in schools, actually practising face-to-face teaching.
- Legislate to involve whole schools to act as support for student teachers, with principals, school departments, year groups and teachers taking clear roles in the process.
- The teacher trainer/educator's role must be expanded to include facilitation, mentoring, tutoring and counselling in addition to teaching and instructing. This calls for a holistic approach to supervision, emphasizing relationships and support rather than only judgement and assessment.
- Develop, in partnership with FoEs and schools, a clear policy on the assessment of student teachers.
- Work with FoEs to increase the range of stakeholders who are systematically involved in the assessment of the Practicum, such as teachers, mentors, school leaders and educational administrators, educational authorities, as well as faculty.

In relation to supporting the learning and improvement of those who are already teachers (CPD):

- Make public the recognition that being a continuous learner is a positive and rewardable characteristic for experienced teachers.
- Make public the recognition that there is not a 'one size fits all' model for Continuing Professional Development but that it sometimes depends on need and local initiative.

- Encourage school principals to nurture partnerships to meet their own CPD needs, drawing in other bodies where appropriate.
- Legislate to make it a formal requirement that teachers undergo a prescribed amount of CPD each term, either for the purposes of licensing, promotion or for performance review.
- Provide support and examples for effective ways in which teachers undertake CPD and how it should be recorded, monitored and evaluated. There may be governmental agencies or NGOs that support the rollout of these policies.
- At a local level, school districts or authorities support particular vehicles for CPD. These will mediate the national approach and address local issues.

Governments should also consider the following measures to support a more beneficial research culture for education, including that of Action Research:

- Provide financial incentives for the participation of schools and practitioners in national teacher development projects including Action Research.
- Improve ease of access to public schools.
- Encourage all faculty members to engage in research and publish.
- Encourage, in particular, publications related to Action Research projects to provide for the recognition of those conducting Action Research by the scientific community of researchers.
- Support FoEs to build systematic research networks with European and North American researchers in order to share practices and knowledge.
- Support FoEs to include research education into programmes of teacher training and involve staff from partner schools in this aspect of provision.
- Work directly with schools to develop cohorts of teachers engaged in Action Research.
- Recognise postgraduate qualifications in education, in a formal sense, as a necessary step in teachers' promotion or career progression.

School in Lebanon

APPENDIX I.

RESEARCH LITERATURE RELATED TO ACTION RESEARCH

Authors	Country of Study	Summary
Soprano and Yang (2012)	Taiwan	Inquiry-based science teaching and self-efficacy
		A study of a pre-service teacher's use of Action Research in the domain of inquiry-based science teaching. Through undertaking an Action Research project, the pre-service teacher's understanding of inquiry-based science teaching and learning were developed and enhanced through the planning and teaching phases of school experience for teaching practice. Concomitantly the teacher's self-efficacy improved as did her self-confidence in teaching science. It is not sufficient for teacher education programs to teach the importance of inquiry-based practices; they need to provide opportunities for pre-service teachers to engage in them.
Jovanovic et al. (2012)	Australia	Pre-service teachers' engagement with assessment rubrics
		This Action Research, undertaken by members of teacher education faculty, explored how the involvement of pre-service teachers in designing assessments enabled them to document the learning processes they had engaged in rather than write formulaic essays based purely on subject knowledge. In carrying out the research the writers were reflecting on their own practice as teacher educators and redesigning the assessment and portfolio aspects of their programmes.
Chen (2012)	Taiwan	Using social culturally oriented Action Research to plan and design a TEFL course
		Using a teacher-researcher approach to Action Research, the writer investigates his own practice in the design and delivery of a course in English as a foreign language. In doing so he considered four aspects – the nature of being a teacher in this context, the professional knowledge of the subject, methods of collaborative and reflective teaching and the specific context of Taiwan. The study reports a higher level of reflection on the part of the students.
Williams et al. (2012)	New Zealand	Exploration of the use of a 'content representation' (CoRe) as a mediational tool to develop early career secondary teacher pedagogical content knowledge
		(See also Hume and Berry, 2010 for a similar Australian study; Eilks and Markic, 2011, for one set in Germany; and Guzey and Roehrig, 2009 for one set in the USA.) The Action Research approach was implemented through the collaboration of a teacher and faculty members, with data elicited from working with early career teachers. The findings were that the teachers were willing to be involved as part of the research team and, thus, to explore the use of the tool. The layering on of research to the normal planning of teaching meant that there was a need for extra time and 'space' to do this. While Action Research is centred on everyday practice it does require extra resource.

<table>
<tr><th>Authors</th><th>Country of Study</th><th>Summary</th></tr>
<tr><td>Mogra (2012)</td><td>UK</td><td>Use of participant Action Research to explore the use of role play in teacher education</td></tr>
<tr><td colspan="3">The “participants” in the Action Research were the students who were following the teacher education course. The locus of research remained with the faculty member, who used their reflections as data in the wider research.</td></tr>
<tr><td>Wyatt and Arnold (2012)</td><td>Oman</td><td>Exploring school-based learner mentoring by a senior teacher</td></tr>
<tr><td colspan="3">The use of post-lesson discussions using video to assist recall were analyzed in the frame of school-based mentoring. A teacher was the Action Researcher (although the paper stresses she was a teacher first), a member of the collaborative research team with members of faculty and a subject of the research. Her role as researcher was enacted through her mentoring of others. In carrying this out, she collected data for the research project.</td></tr>
<tr><td>Sela and Harel (2012)</td><td>Israel</td><td>A case study on the introduction of Action Research into a teacher education college</td></tr>
<tr><td colspan="3">The case study recognises the increasing centrality of Action Research in the portfolio of methodologies employed by members of faculty but its lesser prevalence in the work of teachers themselves. It postulates that addressing this deficiency is both desirable and facilitated by placing Action Research into the curricula of teacher education. Accompanying this move is the bringing together of theory and practice (which resonates in the CDFE project with Practicum).</td></tr>
<tr><td>Adamson and Walker (2011)</td><td>Hong Kong</td><td>A case of a collaboration between teachers and researchers from a teacher education institution looking at student learning</td></tr>
<tr><td colspan="3">This case study focuses on the challenges of collaboration between partners who have different perspectives in an Action Research project. These come from the relationship between schools and the higher education institution and lead to an insider–outsider divide. It examines how these challenges arising from so-called ‘messy collaboration’ may be addressed through hermeneutic conversations that allow each of the partners’ voices to be heard in the process and reporting of the research.</td></tr>
</table>

<table>
<tr><th>Authors</th><th>Country of Study</th><th>Summary</th></tr>
<tr><td>Sales et al. (2011)</td><td>Spain</td><td>The case study explores the role of Action Research strategy in a school-based in-service training programme that responded to the demand by the teaching staff of a primary school</td></tr>
<tr><td colspan="3">The study found changes in teachers' perspectives through their engagement in Action Research: they challenged the premises of deficit theory, and questioned the way they categorised pupils and their families and their own role as teachers. They debated the function of their school, the power relations within it, and the ways of communicating and delegating responsibilities. They found changes in the schools culture: The organisational problems in the school were explored through collaboration and dialogue. A plurality of voices was heard and acknowledged, and the idea of the school as a community arose. Teachers became valuable contributors to the decision-making processes in school.</td></tr>
<tr><td>Cornelissen et al. (2011)</td><td>Netherlands</td><td>A case study of school-university collaboration in Action Research based in the participation of 21 teachers in a master's programme</td></tr>
<tr><td colspan="3">(See also Le Cornu and Ewing, 2008, for a discussion of the development of learning communities of faculty and teachers around a pre-service programme of teacher education in Australia.)

The study looked at school-university research networks that aimed for closer integration of research and practice by means of teacher research. It found that such practice-oriented research can enhance teachers' professional knowledge development, and can benefit both schools and university. A framework for better understanding of such networks was derived.</td></tr>
<tr><td>Jaipal and Figg (2011)</td><td>Canada</td><td>A study of collaborative work between faculty and novice teacher researchers organised into Action Research teams</td></tr>
<tr><td colspan="3">Analysis of the teams as they conducted Action Research resulted in the identification of three collaborative Action Research approaches to promote professional development: Classroom practice within one school, classroom practice within multiple schools and school-wide issues within one school. The findings showed that collaborative engagement of teachers in these approaches was influenced by three factors – time to engage and collaborate, workload, and group dynamics – and that these factors were enacted in the three approaches in different ways.</td></tr>
<tr><td>Halai (2011)</td><td>Pakistan</td><td>This study considered how teachers become Action Researchers in the context of the Ministry of Education attempting to reconceptualize teachers as researchers</td></tr>
<tr><td colspan="3">The study synthesised 20 Action Research theses by MEd students. It found that teachers find Action Research to be both complex and messy due to their dual roles of teacher and researcher. The 'teacher' was concerned with syllabus completion and examination performance. The 'researcher' was concerned with creating valid knowledge about the school and bringing about change. The study concluded that string support is needed, especially in developing capabilities for reflection and observation. It recommended the need to educate teacher educators in Action Research approaches and to include Action Research in the teacher education curriculum.</td></tr>
</table>

<table>
<tr><th>Authors</th><th>Country of Study</th><th>Summary</th></tr>
<tr><td>Barrett et al. (2011)</td><td>UK and sub-Saharan Africa</td><td>This study looks at ways in which collaborations between researchers from the global North and South can move away from being dominated by the agendas of the North</td></tr>
<tr><td colspan="3">Going beyond a mere consideration of Action Research, this paper reflects critically on the experience of a research consortium made up of academic institutions in the UK and sub-Saharan Africa. It analyses participation in setting the research agenda, distribution of leadership and forms of capacity building within the consortium. It found that such collaborations can create novel opportunities to meet the ideals of shared ownership in the framing and leadership of the research. A danger was seen in the potential for the pursuance of different agendas leading to incompleteness in the research. The study concludes that there is a need to examine the need for future research capacity building initiatives to go well beyond elucidating ‘principles’ of shared ownership to explicitly empowering Southern researchers to lead agenda-setting processes within their own local and national contexts.</td></tr>
<tr><td>Zeichner (2010)</td><td>USA</td><td>This article considers the connection of university-based courses and field experiences in pre-service teacher education</td></tr>
<tr><td colspan="3">The paper argues the need for a move from academic knowledge being seen as the only authoritative source of knowledge to a situation where there is a democratic interplay between academic, practitioner, and wider community expertise. It further argues that such a view creates expanded learning opportunities for prospective teachers, essential in the complex role they are taking on. Failure to move to such a paradigm risks universities becoming replaced by schools as the main focus for teacher education.</td></tr>
<tr><td>Ono and Fereira (2010)</td><td>South Africa</td><td>This paper considers the professional development of in-service teachers with a view to using Japanese lesson study as an approach</td></tr>
<tr><td colspan="3">Japanese lesson study is a form of pedagogical Action Research. It was proposed that such an approach could be used to change the way in which professional development was conceived in the case study district. The fact that this form of Action Research was not readily adopted by teachers was deemed to be due to it not being embedded in policy and practice. In addition it was argued that time is needed for such an approach during normal working hours and not as an extra. Finally the need for teachers to share best practice regionally and provincially was recognised.</td></tr>
<tr><td>Tsafos (2010)</td><td>Greece</td><td>This paper deals with the use of Action Research in a postgraduate teacher education programme</td></tr>
<tr><td colspan="3">Action research in a postgraduate teacher education programme in Greece is considered through the lens of bringing together theory and practice. In doing so it develops a model of pre-service teachers becoming themselves reflective practitioners and researchers. It reports on the challenges of developing a focus on pre-service teachers becoming active participants in these other roles which are beyond the act of teaching the many often facets of school life. The need for supportive mentoring is also foregrounded.</td></tr>
</table>

<table>
<tr><th>Authors</th><th>Country of Study</th><th>Summary</th></tr>
<tr><td>Xu (2009)</td><td>China</td><td>This paper describes an action-research project based on a school-university collaborative effort to build teacher's practical, personal reflective experience</td></tr>
<tr><td colspan="3">Since 1999 there has been a policy of devolving partial power in curriculum decision-making to teachers in China. This requires a move from being transmitters of knowledge to taking on Western concepts of being curriculum developers and reflective practitioners. Through a collaborative Action Research project with university academics, teachers are invited to reflect on this transformation. This study accompanies the move to replace university-based training and development with school-based programmes. Thus the role of members of faculty in developing collaborative Action Research and reflective practice among teachers is considered key.</td></tr>
<tr><td>Reis-Jorge (2007)</td><td>Portugal</td><td>A longitudinal study of international teachers' perceptions of teacher-research</td></tr>
<tr><td colspan="3">This case study sought to document teachers' views of teacher-research following instruction and immersion in research and reflective practice approaches. The results of the study confirm previous assumptions that the highly structured nature of the academic format of doing and reporting research may fall short of providing teachers with the skills and tools for reflection that are easily transferable to their practice.</td></tr>
<tr><td>Ainscow (2005)</td><td>UK and elsewhere</td><td>A collaborative Action Research case study over ten years exploring strategies for developing inclusive practices</td></tr>
<tr><td colspan="3">Through working with local authorities and agencies responsible for inclusive education policies, the study found four threads running through effective strategies: Inclusion is a process; Inclusion is concerned with the identification and removal of barriers; Inclusion is about the presence, participation and achievement of all students; Inclusion involves a particular emphasis on those groups of learners who may be at risk of marginalisation, exclusion or underachievement.</td></tr>
</table>

APPENDIX II.

EFFECTIVE PARTNERSHIP: A MODEL

Thanks to Nottingham Trent University for providing this model, which is an extract from their partnership agreement.

Partnership Roles and Responsibilities

The Partnership between the University and Partner schools and colleges acknowledges the following devolution of responsibilities.

University Responsibilities

The University will:

- be responsible for delivering the University-based training
- set assessment tasks for the University-based training
- monitor the Partnership scheme
- pay the School/College a fee for each trainee placed in each professional practice
- pay an agreed portion of the fee in the event of a trainee leaving the University without completing professional practice
- allocate tutors to make regular observation visits during placements and provide support for trainees placed in the School/College
- fund and organise Partnership Development events/meetings for colleagues in Partner schools/colleges
- work with the School/College to ensure that the agreed training plan is delivered
- manage the funding arrangements with the School/College
- through the Examination Board, make a final overall assessment of the trainee against the Teachers' Standards

School/College Responsibilities

The School/College will:

- assign a named ITT co-ordinator who will have overall responsibility in the School/ College for the management of the Partnership and be the main link with the University
- assign an appropriately qualified and experienced Subject Mentor to oversee trainees' professional development (note: in the case of post-16 colleges, the University needs to be informed as to whether that mentor has QTS, since this may affect the way assessment is conducted)
- allocate the Subject Mentor a protected weekly progress meeting consistent with their role
- undertake formal observations of the trainee and provide written and verbal feedback
- ensure the trainee's progress is reviewed, targets identified and actions/training determined
- provide a training plan to promote professional development in line with the trainee's identified individual training needs along with a clear record of observational assessment, Target Setting and review
- organise a School/College Wider Context plan for the trainee consistent with the University's Learning and Teaching in the Wider Context module
- have a leading responsibility for the assessment of the trainee's activity in School/ College in relation to the expectations defined in the Teachers' Standards
- submit progress reports to the University when required
- provide information for quality assurance and enhancement purposes as required including: notifying the University if the

School/College receives notification of an Ofsted inspection; notifying the University of the outcome of any Ofsted inspection; giving prompt notification to the University if there are indications that the School/College may be placed in special measures or given notice to improve; attending University professional development events.

The Trainee

The trainee is expected to take responsibility for their training and progress through the secondary professional year and to establish a professional dialogue with their ITT Coordinator, Subject Mentor, Class Teachers, Subject Tutor, Professional Tutor and other University tutors who support them.

The Trainee:

- prepares, plans and delivers sequences of learning for the prescribed timetabled classes, with support when appropriate
- engages in the assessment processes and practices associated with the sequences of learning they are prescribed to teach, with support when appropriate
- takes responsibility for classroom and behaviour management for the prescribed timetabled classes, with support when appropriate
- attends all training events and sessions provided by the School/College or other professional development activities as prescribed by the Subject Mentor and/or ITT Coordinator
- meets with the Subject Mentor on a weekly basis to review progress
- works and behaves in a professional manner, demonstrating commitment to the course on which they are enrolled and acts in compliance with the suitability to teach, their conditions of service and the University's Student Code of Behaviour
- takes a proactive part in reviewing and developing professional development needs, maintaining the Professional Development Record as appropriate
- takes part in the life and work of the School/ College, including attendance at staff meetings, parents evenings and so on, whenever appropriate and possible
- provides information for quality assurance and enhancement purposes
- follows the School/College and the University's policies with regard to equal opportunities, health and safety, race equality, attendance etc.
- participates in the review and evaluation of the course

The ITT Co-ordinator

The ITT Co-ordinator is a designated member of staff with whole-school responsibilities who has an overall organising and coordinating responsibility for the trainees placed within the School/College.

The ITT Co-ordinator:

- has general oversight of trainee induction into the School/College and of their professional conduct and development during their professional practice placement
- makes clear the professional expectations of the School/College in terms of attendance at meetings, dress and appearance early in the induction period
- co-ordinates the trainees' whole-school experience in terms of their professional development, through the School/College's Wider Context plan, involvement with the pastoral system, contact with parents, involvement in staff and departmental meetings, and so on.
- organises the Primary School Visit for trainees in the School/College for Professional Practice Placement 2, in consultation with the Professional Tutor
- observes communication with others in the School/ College community
- co-ordinates and supports the work of Subject Mentors and, where necessary, Class Teachers, including ensuring the weekly progress meeting is taking place
- monitors the School/College's training, guidance and support for trainees
- observes, reviews and evaluates the work of trainees and provides feedback
- co-ordinates the arrangements for, and participates in, trainee assessment through the Three-way Meeting

- collates and returns Progress Reports
- discusses the Progress Reports with trainees
- liaises with the University Professional Tutor with regard to training, assessment and individual trainees
- attends the Examination Board at the University as required
- participates in the review and evaluation of the course.

The Subject Mentor

The Subject Mentor is an experienced teacher in a particular subject area who takes responsibility for trainees in that subject area. Schools/colleges are asked to consider whether existing responsibilities place too many time constraints to support effective mentoring before allocating the role to, for example, heads of department. Teachers in their induction year are not generally considered to have the experience required for effective mentoring.

The Subject Mentor:

- oversees the induction of the trainee into the department and provides information about curricula, monitoring, assessment, recording, reporting, professional accountability and resources
- liaises with the ITT Co-ordinator, Subject Tutor, Professional Tutor and Class Teachers in order to ensure the provision of a suitable programme of classroom and departmental experience and a support framework
- supports, and, where necessary, arranges, on-going subject training to ensure that the trainee is prepared to teach the subject knowledge appropriate to the classes they encounter
- observes, reviews and evaluates the work of the trainee and provides feedback (including participating in a paired observation with the Subject Tutor)
- arranges a weekly progress meeting with the trainee on a weekly basis for at least 45 minutes
- monitors and supports the trainee's Professional Practice File (including schemes of work, lesson plans, evaluations) and inputs into their Professional Development Record
- plans for future classroom-based and departmental development
- participates in trainee assessment through the Three-way Meeting
- completes Progress Reports for the trainee, including liaising with Class Teachers as appropriate
- discusses the Progress Reports with the trainee
- liaises with the University Subject Tutor with regard to training, assessment and the trainee
- participates in the review and evaluation of the course.

The Class Teacher

Although the Subject Mentor takes responsibility for the trainee within the department, other department colleagues are likely to offer valuable input into the training.

Working in collaboration with the Subject Mentor, the Class Teacher may:

- provide information about pupils to support effective teaching (i.e., IEPs, class lists, statistical data)
- support the induction of the trainee
- support and advise the trainee in relation to all aspects of classroom practice and opportunities for further professional development
- support the trainee in class teaching and pupil contact situations
- observe the trainee within a classroom context and, where agreed with the Subject Mentor, provide oral and written feedback
- provide the Subject Mentor with written information in order to assist with the completion of Progress Reports for the trainee

The Subject Tutor

Every trainee is assigned a Subject Tutor for the duration of the course. The Subject Tutor is a specialist in their subject who has a responsibility for visiting trainees in school/college while on Professional Practice Placement. Subject tutors are academics from the University and so provide a valuable link between trainees' work in the University and their work in the School/College.

The Subject Tutor:

- supports the Subject Mentor in their role and professional development
- supports, and, where necessary, arranges on-going subject training to ensure that the trainee is prepared to teach the subject knowledge appropriate to the classes they encounter
- liaises with the Subject Mentor and Professional Tutor in order to ensure the provision of a suitable programme of classroom and departmental experience and a support framework
- observes, reviews and evaluates the work of the trainee and provides feedback (including participating in a paired observation with the Subject Mentor)
- monitors the trainee's Professional Practice File (including schemes of work, lesson plans, evaluations) and their Professional Development Record
- participates in trainee assessment through the Subject Mentor and Professional Tutor
- liaises with the School/College Subject Mentor with regard to training, assessment and the trainee
- participates in the review and evaluation of the course.

The Professional Tutor

Every trainee is assigned a Professional Tutor who is attached to each of their Professional Practice Placements. The Professional Tutor is responsible, in consultation with the School/College ITT Co-ordinator for overseeing their time in school. Professional Tutors are academics from the University (who may also be Subject Tutors) who are very experienced as both teacher educators and school leaders.

The Professional Tutor:

- maintains a regular link between the School/ College and the University by visiting the School/ College regularly supports the ITT Co-ordinator in their role
- liaises with the ITT Co-ordinator and Subject Tutor in order to ensure the provision of the trainees' whole-school experience in terms of their professional development, through the School/ College's Wider Context Plan, involvement with the pastoral system, contact with parents, involvement in staff and departmental meetings, and so on.
- meets with trainees, the ITT Co-ordinator, Subject Mentor and other staff to complete Placement Reports, to determine issues that impact trainees' progress, including making connections between the University and the School/College training
- organises and monitors the Partnership from the University's perspective; liaising and communicating with others in the University community
- supports the work of Subject Tutors and, where necessary, other University Tutors
- observes, reviews and evaluates the work of trainees and provides feedback
- participates in, trainee assessment through the Three-way Meeting
- contributes to Progress Reports for trainees, including liaising with Subject Tutors
- discusses the Progress Reports with trainees
- liaises with the School ITT Co-ordinator with regard to training, assessment and individual trainees
- attends the Examination Board at the University as required
- participates in the review and evaluation of the course.

Other University Tutors

Subject/Strand Leader

The Subject/Strand Leader oversees the design, delivery and quality assurance of their specialist subject strand. They all have national and international reputations for their expertise in their subject and its pedagogy, and work with trainees in the development of their own subject and classroom practice.

Wider Context Tutor

Every trainee will be assigned to a Wider Context Group. This is a mixed subject group and will be overseen by a Wider Context Tutor. The tutors are all drawn from the core Secondary Education team. As well as leading some of the seminars, they support trainees in the preparation and delivery of the trainee-led seminars and in their Learning and Teaching in the Wider Context Assessment.

Subject Administrators

The Subject Administrators have overall responsibility for the co-ordination and administration of the Subject Strands and Wider Context. They will support trainees, tutors and school/college colleagues in their roles as appropriate.

Course Leader

The Course Leader has overall responsibility for the design, delivery and quality assurance of the course. They will support other key tutors in their roles when appropriate.

Partnerships Manager

The Partnerships Manager has overall responsibility for the development and quality assurance of the Partnership. They will support other key tutors in their roles when appropriate.

Partnership Co-ordinator and Administrator (Partnership Office)

The Partnership Co-ordinator and Support Administrator work in the Partnership Office and have overall responsibility for the co-ordination and administration of the Partnership. They will support trainees, tutors and school/college colleagues in their roles as appropriate.

Capacity Development of Faculties of Education in International Approaches to Higher Education
Project number: 530614 - TEMPUS - 1 - 2012 - 1 - EG - TEMPUS - JPHES

The CDFE Partnership: Foundational Principles

The Partnership is about Change and Transformation
The Partnership is a Collaborative and Collegial One
The Partnership Constitutes a Community of Learners
The Partnership is a First Step in Long Lasting Relationships and Friendships
The Partnership respects Diversity, Multiculturalism and Internationalization

Co-funded by the
Tempus Programme
of the European Union

THE AMERICAN
UNIVERSITY IN CAIRO