

# EXPANSIVE EDUCATION NETWORK Research digest

## Learners becoming teachers

Winter 2012

### Message from the team

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Welcome to our third Expansive Education research digest. In this termly publication we aim to provide coverage of important themes for expansive educators. This third issue focuses on the benefits of learners taking on more active teaching roles; teaching themselves, and others.

Expansive Education is all about what really matters in school. There are many things learners need to know if they are to leave school knowledgeable about the world and not ignorant of important facts. Of course exam results are important, whether to demonstrate knowledge or to get to the next level of education. We might call this 'Game One'.

And yet, *what else* do you want your learners to leave school with? *What else* will stand them in good stead for their experience in the real world of further or higher education, of work, or of life outside all of these? How will they cope when they don't know the answers?

The broader goals of expansive education – a growth mindset; learning dispositions – 'Game Two' - are so inspiring because of their significance to learners' futures, but also because they directly improve results in 'Game One'.

We know anecdotally that by explaining something to somebody we understand it better ourselves, and that, by learning to help others elaborate their responses, we learn to question better ourselves. And through better questioning, we have enhanced understanding. But there is increasing evidence for the benefits of doing this.

Here we explore notions of peer coaching, and the importance of learners becoming *their own* teachers; taking responsibility for their own learning which, ultimately, leads to their success in Game One *and* Game Two.

*Bill Lucas, Guy Claxton, and Ellen Spencer*

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*'The remarkable feature of the evidence is that the biggest effects on student learning occur when teachers become learners of their own teaching, and when students become their own teachers. When students become their own teachers they exhibit the self-regulatory attributes that seem most desirable for learners (self-monitoring, self-evaluation, self-assessment, self-teaching). Thus, it is visible teaching and learning by teachers and students that makes the difference'*

John Hattie:

*Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*

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## What is peer teaching?

Or peer education? Use of peer teaching can be evidenced in ancient Greece, but today, its use is influenced by the work of Paolo Freire, who suggested that the best outcomes in terms of learning, development, and personal and cultural change, are obtained when individuals learn and develop as equal partners in the process. Teachers shift in their role from 'expert' supervisor to equal partner, or facilitator\*.

Education Scotland suggests that peer education is an increasingly popular method of educating learners, with benefits including improved knowledge, skills, attitudes, and confidence.

Education Scotland describes 'peer education' as being:

'an approach which empowers young people to work with other young people, and which draws on the positive strength of the peer group. By means of appropriate training and support, the young people become active players in the educational process rather than passive recipients of a set message. Central to this work is the collaboration between young people and adults'

Source: <http://www.educationscotland.gov.uk/learningteachingandassessment/approaches/peereducation/index.asp>

## What a peer educator does

In Lynne Tammi's guide to training peer educators for Education Scotland (aimed at people developing students aged 15-25 as peer educators), peer education is seen as a formal task that requires training so that peer educators are empowered to share their skills and knowledge with peers.

Training is put forward as being an essential component of any peer education programme. First of all, training needs should be assessed. Second, peer educators require training in skills such as communication, facilitation, research and evaluation. Third, there should be opportunities for personal development for peer educators built in to any programme. Fourth, all this should be linked back to formal knowledge – for example – Tammi cites The European White Paper on Youth as being an important source of information.

As part of peer educator training, it is important to identify the role of the peer educator:

### A peer educator does:

1. Facilitate trust, openness and safety
2. Accept people as they are
3. Listen, clarify and help people see alternatives
4. Respect confidentiality
5. Realise that not all problems can be solved and that not all people want help
6. Work in partnership with other group members

### A peer educator does not:

1. Tell people what to do
2. Judge people or try to challenge them
3. Give advice or offer solutions
4. Put people down
5. Discuss what was said in a group unless they have permission
6. Attempt to provide support and information beyond what he/she is qualified to do

\* Lynne Tammi (2003) *Telling It Like It Is*. [Online]. Article 12 in Scotland. Available: [http://www.educationscotland.gov.uk/resources/t/genericresource\\_tcm4251861.asp?strReferringChannel=learningteachingandassessment&strReferringPageID=tcm:4-627487-64](http://www.educationscotland.gov.uk/resources/t/genericresource_tcm4251861.asp?strReferringChannel=learningteachingandassessment&strReferringPageID=tcm:4-627487-64) [Accessed 27 November 2012].

## The Flipped Classroom

While some criticize the notion of the 'flipped classroom' (also called 'reverse teaching' or the 'backwards classroom') as being about use of e-learning as a replacement for the classroom and the class teacher, the idea behind it is that rather than being talked to by a teacher, students use their own time to study content. Direct instruction is taken away from the classroom so that class time can then be used for other things. These 'other things' may include project-based learning or other means of encouraging quality learning. Flipping the classroom is said to increase student interaction, as well as the way teachers interact with parents.

**Student interaction:** teachers become learning coaches rather than presenters of content. They can spend their time talking with students rather than at them, and they can find out more about the struggles each student is going through. In this way, students can be organised into short-notice self-help groups, teaching can be 'just-in-time' – i.e. as and when needed, and on whichever topic is presenting a problem at a given moment. Students learn from one another rather than relying on the teacher as the fount of knowledge.

Parent interactions: rather than asking questions aimed at behaviour: 'does my child sit still and listen when you're talking to him?', these sorts of questions have a lower relevance in the flipped classroom. Parents now need to ask 'is my child learning, and how can I help him learn?'

Sources:

<http://www.thedailyriff.com/articles/teachers-doing-the-flip-to-help-students-become-learners-531.php>

<http://www.thedailyriff.com/articles/how-the-flipped-classroom-is-radically-transforming-learning-536.php>

<http://flipped-learning.com/?p=1064>

## Flipping the classroom...back again

As an extension of this idea, a recent article pointed out to us by Mastering Learning founder Mary Niemczyk looks at how one teacher in New York used video technology to 'flip' the classroom so that students were teaching teachers how to use new technologies. In this sense, the 'flipping' meant that rather than professional development occurring in teachers' own time (or out of the classroom), CPD was being brought into the classroom in a way that benefitted both teacher and learner.

In this instance, it worked as a lesson in media literacy for teachers, with students benefitting from the experience. Students posted videos to a blog so that teachers (and anyone with internet access) could access information on 'Tech Under 90 Sec' from outside of school. Videos had to show teachers how to use everyday tools such as Google Drive in less than a minute and a half. Students, as we all know, are often far better at accessing and utilising new technologies than their teachers and assignments such as this provide the perfect learning opportunities for students to engage with material that interests them, while learning content, and yet – key from an expansive education point of view – also benefitting from the practice of teaching others.

The article with more details of the technology can be found at: <http://thejournal.com/articles/2012/11/12/using-student-video-to-evolve-the-flipped-classroom.aspx?admgarea=Features>

## Teaching students leadership skills

In an article of the same title, Sir Tim Brighouse discusses the importance of student involvement in school life from first-hand experience.

Student involvement takes many forms, including school councils, peer-counselling, budding, mentoring, peer tutoring, or the dealing out of jobs to students to give them a sense of responsibility and the teacher a lighter load, but is an important aspect of school improvement. Brighouse suggests that 'after all, we know that "pupils teaching other pupils" is highly effective for the deliverer and the recipient: so peer-tutoring, peer-mentoring and peer-counselling are vital ingredients of student involvement'.

He identifies two Somerset-based comprehensives that have taken on the programme 'Learning to Lead' and have consequently transformed his view of what can be achieved through student leadership.

Students in the programme opt to participate in one of a series of mixed-age teams within the school, each of which has to generate activities of value to the community in some way, whether that be the school, the town, or a more broad geographic impact. In the school in question, teams included, among others:

- The bookwork team – encourages students to read
- We love science – works within staff to improve educational experiences in science
- The chicken team – manages the school chicken coop
- The green team – has environmental goals

Although Brighouse gives many examples of ways in which students can be involved in school life, most significantly for expansive education is the idea that students can also be involved in teaching and learning. Examples here include formative peer assessment, as well as in the planning and delivery of 'flipped' lessons.

Flipped lessons are described here as being ones:

'where pupils research a new theme on the internet and then present in a pre-planned way in lessons so that other pupils and the [teacher](#) respond and pupils move their learning from dependent (shallow) through independent (deep) to interdependent (profound) levels.'

Tim Brighouse (2012) *Teaching Students Leadership Skills* [Online]. SecED. Available: <http://www.sec-ed.co.uk/best-practice/teaching-students-leadership-skills> [Accessed 27 November 2012].

*Learning to Lead is a programme enabling large numbers of students to lead in the design and implementation of projects that help transform their learning and their schools. The scheme was created in 2002, borne out of a concern for the lack of opportunity for genuine student involvement in the life of school communities. The programme was gradually extended to other local schools and now 75 new schools have joined in the past three years. The expansion of Learning to Lead is being supported by the Esmee Fairbairn Foundation.*

## Reciprocal teaching

Reciprocal teaching is a dialogue between teachers and learners in which learners take the role of the teacher. It is essentially an application of Vygotsky's ideas about the connections between language, cognition, and learning. It is an application of the notion of scaffolding, derived from Vygotsky's 'zone of proximal development' concept.

The zone of proximal development refers to the gap between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers.

In reciprocal teaching, learners aim to learn from text. They do so in collaboration with their teacher and by practising four key skills:

- summarising
- questioning
- clarifying
- predicting

A 1994 study by Marie Kelly and colleagues assessed the effects of specific, overt instruction in the four areas – summarizing, self-questioning, clarifying, and predicting – upon the comprehension of 'poor reading comprehenders' reading nonfiction material. Two classes were given the instruction and both showed significant improvements in comprehension scores, and in daily comprehension tests over a period of 20 days' instruction. A third group were given no overt instruction, and the gains in comprehension were not seen in this group.

Significantly, 8 weeks later, the gains evidenced in the first two groups were maintained. Further, their reading comprehension for fiction material also improved, which suggests that the process of instruction has transferrable benefits – always a goal of expansive education.

Participants suggested that one of the reasons it was hard to remember text just read was because 'you lose your memory'. The authors of the study proposed that the reciprocal teaching method works because it helps novice readers to become better at 'cognitive encoding, organization, and integration of material they read and in the executive functions of self-monitoring and control of comprehension, thereby helping them to find that memory'.

Marie Kelly, Dennis Moore, and Bryan Tuck. (1994) Reciprocal Teaching in a Regular Primary School Classroom *Journal of Educational Research*, 88(1): 53-61.

## The process of reciprocal teaching

Based on the study by Marie Kelly and colleagues, the following summary describes how teachers might adopt the process of reciprocal teaching into their classrooms.

Initially, teachers model the metacognitive strategies used. Learners answer questions and discuss passages of text they are presented with. Teachers provide clear feedback to any learner attempting to use one of the four metacognitive strategies.

- At the start of a session, the teacher initiates a discussion based on the title of a story.
- Learners discuss the title, making predictions about what might happen in the story.

During the next phase, learners ask for clarification if necessary:

- Learners are given the first part of a text and required to read it silently.
- Learners consider how they might give a short summary of the text.
- Learners compose a 'teacher-like' question about the text.
- Learners predict what might occur in the next installment of the text.

The process repeats, with learners taking turns to take the 'teacher' role as dialogue leader.

In order to help ensure that the benefits of this process transfer into other areas, teachers constantly reinforce the notion that the process and strategies are generalisable, and encourage learners to try them out when reading other sorts of text for other purposes.

Marie Kelly, Dennis Moore, and Bryan Tuck. (1994) Reciprocal Teaching in a Regular Primary School Classroom *Journal of Educational Research*, 88(1): 53-61.

## Reciprocal teaching in action: taking on the role of questioner

Joan Williams, from Texas, taught bilingual students before they moved on to a mainstream classroom. In a paper revisiting the role of reciprocal teaching, she describes her realization that although her students were comfortable asking her many questions, they did not have the confidence to take on the role of questioner outside of her classroom.

As an expansive educator, Joan realized that she needed to take a new approach in order to develop the learning habit of questioning in her students, which is when she revisited the reciprocal teaching approach, one used only infrequently in schools in her opinion. In the past she had tried to implement the approach with little success, because students needed more support than she was able to give to a whole class at once.

This time around, Joan tried using guided reading with small-groups using expository texts – those aiming to inform the reader; to explain the author's subject – because of their academic vocabulary and text structure.

She first modeled how one might make a reasonable prediction. The key here was not accuracy, but that the prediction made sense. She emphasized that strong readers tend to make reasonable predictions – though not necessarily accurate ones.

She next modeled how to ask a 'heavyweight' question – one that moved towards higher levels of thinking and a desire to find out more than what lies in the text alone. For example, using a text on cyclones, a heavyweight question might be "what is the difference between a cyclone and a tornado?". In contrast, a 'lightweight' question would be based on the content of the text itself, for example: "what colour was the car?".

She then asked students whether they needed specific words clarifying. This helped them ask clarification questions. They then moved on to asking conceptual clarification questions about ideas presented in the text that they had not grasped at first.

Finally, she modeled how to summarise what they had just read. She contrasted partial summaries with full summaries. After five days' modeling, she turned over responsibility for taking on the role of the teacher to each student in turn.

Students gradually took on the role of questioner with ease and confidence. They were able to ask questions of one another during discussions of other texts, using the text as a persuasive tool to help make their argument.

Joan argues that reciprocal teaching is powerful because it involves so much questioning: both in the questioning phase and the clarification phase. Learners become experienced in asking questions, and realise that this is just a part of trying to understand, and not a sign of weakness. Ultimately, the process helps to develop a culture of passionate curiosity.

In this way, says Joan: 'teachers can move students away from a narrow perspective of the language of right answer and guide students to a broader understanding of the characteristics and use of academic language'.

Joan Williams, (2010) Taking on the Role of Questioner: Revisiting reciprocal teaching. *Reading Teacher*, 64(4): 278-271.

## 'Be the teacher' bookmark

Joan Williams used the 'be a teacher bookmark' to help students lead discussions.

### PREDICT

Use clues from the text or illustrations to predict what will happen next

*I think... because...*

*I'll bet... because...*

*I suppose... because...*

*I think I will learn... because...*

### QUESTION

Ask questions as you read.

Ask some questions that have answers in the text.

Use the question words *who, what, where, when, why, how, and what if.*

Try asking some questions that can be inferred.

Use clues from the text plus your experience.

### CLARIFY

How can you figure out a difficult word or idea in the text?

Reread, reread, reread!

Think about word chunks you know.

Try sounding it out.

Read on.

Ask. Does it make sense?

Talk to a friend.

### SUMMARIZE

Using your own words, tell the main ideas from the text in order.

*This text is about...*

*This part is about... "*

## Visible learning

In his synthesis of over 800 meta-analyses relating to achievement, John Hattie explored the factors that impact upon student learning. His key message is that both teaching *and* learning have to be 'visible'.

It is easy to focus on what the teacher does but, argues Hattie, what learners *do* is fundamentally important also.

We have talked about peer tutoring – where learners teach one another, explain concepts to one another, and check one another's work – and indeed, as Hattie has shown, this has a significant impact.

But the notion of 'learners as teachers' is not just about peer tutoring. There is an individual element to it that is even more important for learning.

Learners need to be active in the learning process to the point where they can become *their own* teachers (not just teachers of others). For Hattie, becoming their own teachers entails such activities as:

- Seeking out optimal ways of learning new materials and ideas
- Seeking out resources to help with their own learning
- Setting themselves appropriate and challenging goals
- Being involved in determining their own success criteria
- Setting increasingly higher expectations for themselves
- Being open to experiences relating to differing ways of knowing and problem solving
- Engagement in self-assessing, self-evaluating, self-monitoring, and self-learning.

Being able to facilitate discussions with others is really just a means of getting learners to flex their own thinking, reasoning, questioning, clarifying 'muscles'.