

Coursework wiki

Learner and teacher: one and the same?

The emphasis of equal participation in the learning process

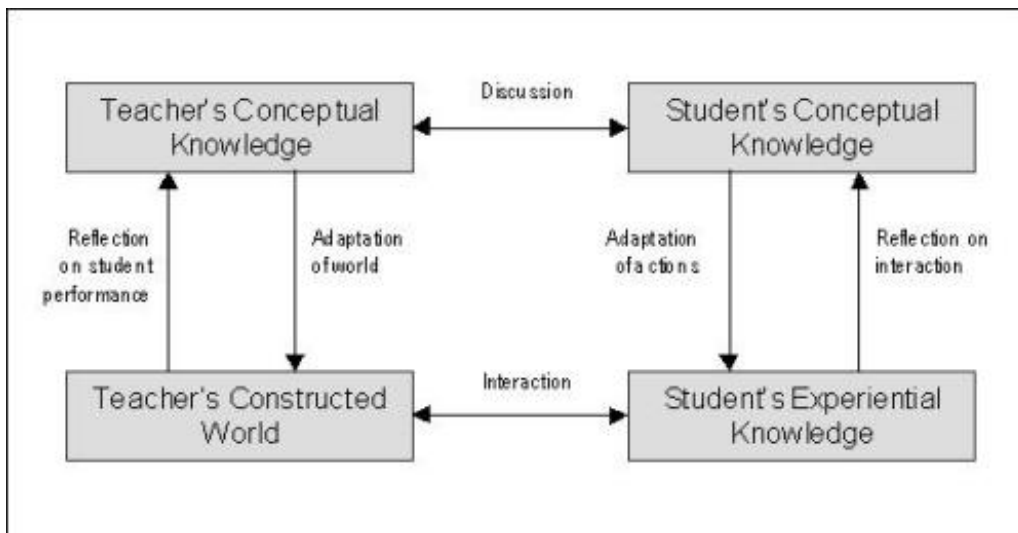
Learn
and
Grow...
Together!



"Tell me and I forget. Teach me and I remember. Involve me and I learn" - Benjamin Franklin

Laurillard's Conversational Model and Underlying Principle

Diana Laurillard (1991; 1993; 2002) developed a model of teaching that is known as the Conversational model. This model depicts that learning is based upon "second order" experiences of the world, whereby it is not enough to just have your view and experiences; you also have to examine other's views and arguments to fully learn. Therefore, learning involves mapping between experiences of the world and mediating these arguments and descriptions from others. From this Laurillard proposes that **learning should be viewed as dialogue between teacher and student**, with four different characteristics to optimise this dialogue; it must be discursive, adaptive, interactive and reflective. The discursive concept relates to learners and teachers agreeing upon learning goals and tasks, with conceptions held by one being accessible by the other and the environment created should allow for learners to assess, generate and act upon feedback which are focused towards the agreed goal. The adaptive concept is related to the teacher using feedback about what the learner understands to revise learning goals appropriately, whilst the interactive concept relates to the teacher providing the necessary feedback to students to understand why goals may need to be changed or kept in place based on their performance in tasks and their understanding. The reflective concept indicates that the teacher needs to support students in making connections between the task and their experiences of it to the topic and to the topic goal to promote greater understanding.



From this model, **the underlying principle purports that teachers and learners have to be equally active in the learning process for there to be maximum benefits.** The teacher has to be with the learner at every stage, providing an environment whereby they can relate what they are doing to the world, as well as to recognise when they need to revise goals to make sure understanding of that part of a topic is obtained.

Evidence for the Theory

Teacher Approaches to Teaching

The way a teacher approaches their teaching has been shown to affect the way a learner will subsequently adopt a deep approach to their learning (Trigwell and Prosser, 1991). Ramsden (1992) indicated that students who perceive that they are experiencing “good teaching” are more likely to adopt a deep approach to learning. “Good teaching” was defined as teaching that involved giving helpful feedback, making an effort to understand the difficulties a student may be having, giving good explanations, making the subject interesting, motivating the students and having an interest in what students have to say. Trigwell, Prosser and Waterhouse (1999) furthered this idea by studying quantitatively what the teachers’ perspectives were to their approach to teaching, as well as the learners’ perceptions. They found that if teachers, for example, reported focussing on a teaching style which is based mostly on just transmission of facts to provide learners with the basics, their learners are more likely to adopt a surface approach to learning. Whereas, teachers who reported focussing more on creating an environment where the learner is engaged in their activity, found this was more beneficial to the learner. For example, providing an environment with the learner being the focus of the learning and the teacher focussing more on making time for learners to interact and discuss the problems they face, where the teacher can provoke a debate, and uses the time to question learners’ ideas and develop a “conversation” with students in lectures. **They found that providing this type of environment was more likely to promote learners to adopt a deep approach to learning.**

This indicates the importance of the way teachers conceive teaching and learning. Those teachers who conceive of learning as information based to meet external demands will teach in a transmission of information type approach, and their style will be more focused on themselves as a teacher and how better to rely this information effectively. Whereas, teachers who conceive of teaching on the basis that it is to help learners develop and change their conceptions of topics will approach their teaching in a much more student-focused manner. Trigwell, Prosser and Waterhouse (1999) provide an example of the theory that **learners and teachers have to both be active in the learning process for effective learning to occur**, and this in part supports Laurillard’s model in the way that a more “conversationalist” approach to teaching will support higher level learning.

Supporting Self-Directed Learning

The Stage Self-Directed Learning (SSDL) model was suggested by Grow (1991) which adopts a close relationship between teacher and learner in the learning process to eventually promote self-directed learning from the learner. The model is proposed on the basis that each learner is at different stages in their learning, they understand different topics differently and are motivated in different ways, making it very difficult for teachers to provide the best over-arching teaching for all learners of one topic. The model filters into “conversationalist” and “scaffolding” theories, whereby the **teachers’ aim is to assist learners to become their own teachers, by being active at every level of their process and slowly morphing from teachers to participators of the learners’ learning.** The purpose is for the teacher to assess the learners’ stage of self-direction towards their learning and prepare them for higher levels of self-direction:

| | | | |
|---------------------------------|--|--|--|
| S4: Self-Directed Learner | | | Independent projects. Student-directed discussions. Discovery learning. Instructor as expert, consultant, and monitor. |
| S3: Involved Learner | | Application of material. Facilitated discussion. Teams working closely with instructor on real problems. Critical thinking. Learning strategies. | |
| S2: Interested Learner | Intermediate material. Lecture-Discussion. Applying the basics in a stimulating way. Instructor as motivator. | | |
| S1: Dependent Learner | Introductory material. Lecture. Drill. Immediate correction. | | |
| | T1: Authority, Expert | T2: Salesperson, Motivator | T3: Facilitator T4: Delegator |

This type of model is an example of how **equal participation in the learning process between teacher and learner promotes learners to learn how to manage their own learning effectively.** Every stage has to be mediated by the teacher, but not in the sense that they need constant instruction or transmission of information about a topic, but in a holistic manner where the teacher assesses at each stage of the learning process how the learner is coping and if their self-direction is progressing.

Critiquing the Gap between Theory and Evidence

- One of the main areas of contention of this principle pulled from Laurillard’s model is the assumption of skills of autonomy and self-direction that may not be possessed by learners yet. The idea that both learners and teachers have to be equally active within the learning, suggests that the learner has the capability to understand their learning. This may work within higher educational settings well, but not so much in say primary classes, where learners may not know enough to be able to understand their experiences of learning or be able to set their own learning goals with the teacher. To cater for individual

learning styles, this type of equality may not be productive, as learners may not have metacognitive control over why they are learning yet (McLoughlin and Oliver, 1995)

- Another area of contention lies within the contribution of peer discussion to the process of learning. Laurillard's model promotes equal emphasis on teacher and learner but fails to acknowledge the importance and effectiveness of peer interaction. Chi et al. (2008) highlight the role peer discussion can play in learning by demonstrating that participants who engage in peer discussion after viewing a video tutorial performed superior to participants that did not engage in peer discussion. This suggests that the effectiveness of a teacher may not stem only from their knowledge, but from the discussion they promote. The substitution of a peer in discussion seems effective and could arguably promote deeper learning as learners may feel more confident in challenging points made by peers and encouraging them to explain and justify their reasoning. Therefore, the model could be revised to include peer discussion in order to further maximize learning potential.

If you are only going to read 3 things...

Laurillard, D. (1993). *Rethinking university teaching: A framework for the effective use of educational technology*. Routledge: London. (Chapters

Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2), 175-181.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher education*, 37(1), 57-70.

Equal learning is dependent upon both being active in the process, an example of how they might do this is shown in the table:

| Teacher | Learner |
|---|---|
| <ul style="list-style-type: none">• knows how the learner learns best• uses Universal Design for Learning• redesigns learning environment• Integrates technology• designs assessment strategies• recognizes high-quality resources | <ul style="list-style-type: none">• establishes learning goals with teacher• creates a personal learning plan• chooses how to access content• has a voice expressing what they know• selects the way to engage with content |

Cross Links

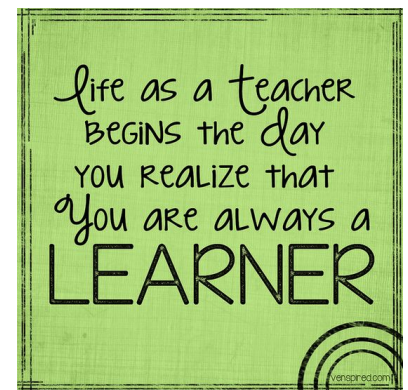
Teacher Training

If there are benefits from an equal emphasis on learners and teachers being active in the learning process, then in a sense learners and teachers have to be one and the same. **Those who are learning eventually**

have to become sufficient at being their own teachers, and those who are teachers need to be actively learning continuously to provide the best teaching environments and to stay active within the process of the learner learning. Professional development may be an area where this idea of equal emphasis of learning on learner and teacher crosses over. It is not just that the teacher has to be engaged in the learners learning, but they also have to be active in their own learning of how to better support learners in a specific topic. Garet et al. (2001) found in a national survey that teachers who received professional development that involved active learning and was focused on understanding of content enhanced their knowledge of the content and how to teach it effectively. Saxe et al (2001) compared three types of support for teacher learning; traditional professional development workshops; professional community-based activity that supported teachers on new curriculum topics; and the Integrated Mathematics Assessment approach (IMA). The IMA approach involved teachers attending a five-day summer course and then subsequently meeting once every two weeks throughout the year to discuss their practice and problem solve together. They looked at samples of student work or videotapes of students involved in problem solving and learned how to assess student motivation. They also developed specific pedagogies that included how to lead whole-class discussions, assess student work with rubrics, and create assessment tools of their own, which they shared with one another. It was seen that students whose teachers had participated in the IMA programme had the greatest gains in conceptual understanding. This is due to the nature of the development programme enabling the teacher to develop pedagogical content necessary to teach the course. Providing active learning opportunities allows teachers to transform their teaching, to understand more of how to assess what the learner needs, and focusing on being active within the learning process both themselves and with the learner.

Darling-Hammond and Richards (2009) indicated that professional development:

- Deepens the teachers knowledge of the content and how to teach it
- Helps teachers understand how students learn specific content
- Provides opportunities for hands on learning
- Enables teachers to acquire new knowledge, apply it to practice, and reflect on the results with colleagues.
- Is collaborative and collegial.
- Is intensive and sustained over time.



This research indicates that **providing intensive, content-rich learning opportunities for teachers can improve both teaching and student learning.**

When schools support teachers with well-designed professional development programs, those teachers are able to create the same style of dynamic and engaging environments for students. This highlights a way in which the idea of equal emphasis on teacher and learner goes beyond the surface matter to being more of an equilibrium between the teacher and learner, both have to be active and participate in their own learning to be able to facilitate the ultimate learning goals of the student.

Learning Autonomy

Little (1995) argues that the best learners are autonomous learners who will:

- Integrate new and previous knowledge
- Take responsibility for his or her learning
- Transcend the barriers between learning and living
- Therefore, are the best teachers those that teach students learning autonomy and produce individuals capable of deep learning (an important goal of higher education)? Little (1995) claims that teacher autonomy is required before learner autonomy can be obtained. Teachers who are successful are generally autonomous beings as they hold a strong sense of personal responsibility for their teaching

which they exercise through continuous self-reflection and assessment of teaching success.

“In order to obtain learner autonomy- there requires a shift in the role of the teacher from purveyor of information to facilitator of learning and manager of learning resources”. Little (1995)

- This is in line with Draper's (1997) idea that the teacher could be viewed as a manager of learning who provides the appropriate tools for learning and the opportunities to practice using them. They teach the skills required for acquiring knowledge and for deep learning. If we place equal emphasis on teacher and learner in the learning process, then there is a concern that learners will become only consumers of ready-made inflexible courses which are not tailored to individuals nor promote interaction, discussion and deep learning. Higher Education Institutions often aspire to produce critical and independent thinkers who can acquire and manipulate knowledge. To do this, teachers must emphasize the contribution of learners and promote self-study within students in order to ensure they have the tools to become life-long learners and obtain learner autonomy.

A Progression?

During the younger years of education, it seems plausible that a larger contribution is required from the teacher in the learning process. During primary school and the early years of secondary school, students are generally not mature enough to take responsibility for their learning and require steady guidance in their education. However, as individuals mature and develop their knowledge and skills, they can become more autonomous in their acquisition of knowledge and rely less on their teachers. Therefore, it could be argued that the proportion of input from learner and teacher gradually shifts from a stronger emphasis on teacher in primary school to an equal emphasis in early secondary school and then to an emphasis on learner in higher education.



The input and emphasis a teacher commands may also progress throughout their career. Cooper and McIntyre (2011) found that experienced teachers, in comparison to novice teachers, had developed increasingly sophisticated schemata. These contained information about how to teach a wide range of subject matter effectively and how to promote learner autonomy in individuals which in turn, would improve deep learning. Therefore, more experienced teachers may support and promote more emphasis on the learner as they acquire a deeper understanding of how students can guide their own learning and acquisition of knowledge.

The Impact of Assessment

The assessment method employed can affect the contribution of both the learner and teacher in the learning process and influence the type of learning they engage in and promote.

It is often argued that the use of 'straightforward' assessments that include multiple choice questions and short questions that test separate ideas encourages surface learning in students. In order to obtain a high grade, learners must learn as much information as possible to recall in the exam but are not required to manipulate and form opinions on said information to achieve a good grade. However, Warren (2004) argues that this is not always the case as even the most simple of assessment questions often requires learners to apply their knowledge of theories and laws to a particular situation rather than just quoting them. Therefore, assessments require a spectrum of learning from surface to deep and Warren contends that the assessment set out for a given course, can strongly impact a student's approach to learning.

It can also be argued that the assessment and the pressures that coincide with it, can strongly impact a teacher's approach to learning. Teachers can often encounter large classroom sizes, large course content and pressures from higher bodies to have 'x' number of students sit and pass the exam. When this is coupled with an assessment which requires only shallow knowledge for an assessment pass, teachers often face little

option but to teach only the basic requirements of the course with the expectation that students will attain a deeper knowledge outwith contact teaching hours. However, without intrinsic motivation from students, a deeper learning may not always occur.

Classroom Diversity

Another issue occurring more frequently today is the fact that **classes are diversifying and teachers are facing major difficulty maintaining academic standards**. Biggs (1999) argues how the contribution of a teacher to the learning process can be strongly affected by a large diversification of students. In this model below, there are two student mind-sets represented. Academic Susan is committed, bright, interested, has clear academic and career plans and believes what she learns is important to her. The other student, un-academic John, is at university to obtain a qualification for a job, he is not studying in the area of his first choice but is aware that a pass will result in a well-paid and respectable job. The model below illustrates a two-way interaction between the degree of learning-related activity that a teaching method is likely to stimulate and the academic orientation of the students because both of these will jointly impact the students' level of engagement in tasks. It shows how a teacher can manipulate the contribution and quality of learning a student must input into the learning process.

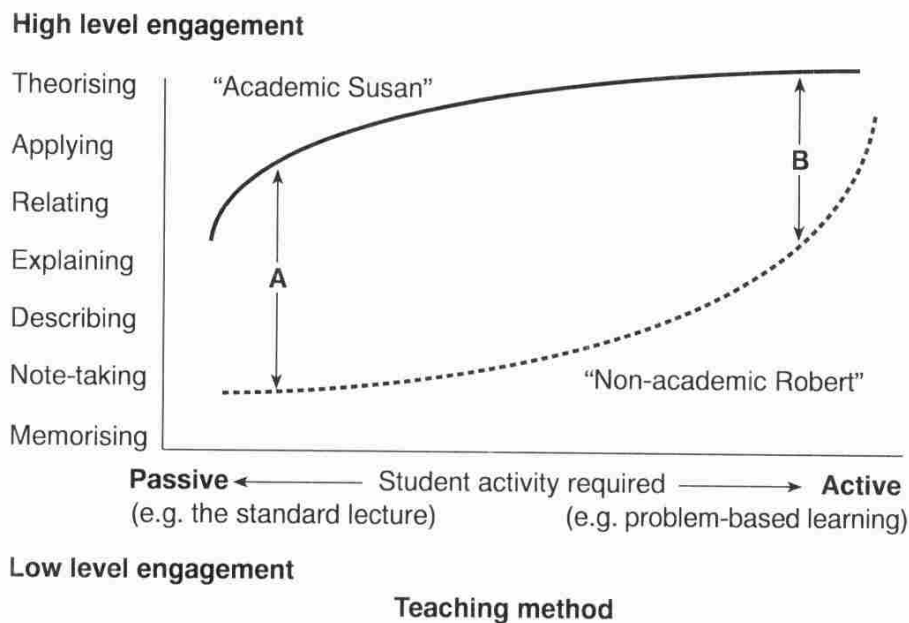


FIG. 1. Student orientation, teaching method, and level of engagement.

“Good teaching is getting most students to use the higher cognitive level processes that the more academic students use spontaneously. Good teaching narrows the gap” Bigg (1999)

Learning styles

In her research, Laurillard (1993) emphasises the impact that contextual factors may have on different learning styles: the knowledge that has already been acquired before a certain course will affect the way that new information is acquired during the course. Montgomery & Groat (1998) note the impact that individual factors, such as personality, may have on different learning styles. According to Montgomery and Goat, taking different learning styles into account when planning teaching programmes is important, as it has an influence on the overall quality of teaching. These two ideas do not contrast each other, but they provide different viewpoints to exploring learning styles, and the impact they may have on teacher and learner contributions.

Laurillard explored factors that potentially affect different styles and approaches to learning by having a group of students perform a series of problem-solving tasks. The results showed that students' approach to learning was dependent on contextual factors, such as the nature of the problem, as well as the student's own perception of teacher's requirements. It was concluded that the degree to which learner and teacher have the potential to influence learning is both context dependent and individual dependent.

Learning as an Interaction

Montgomery & Groat (1998) as well as Vermunt & Verloop (1999) see learning and teaching as an interaction. The authors of these studies note that learning in itself can, and should, have an influence on teaching styles. In order for the students to be able to gain the maximum benefits from the teaching and the material provided in classes, teaching should be directed to students so that their individual learning styles are taken into account. Furthermore, the authors suggest that teachers may be able to influence the students' learning styles: students can be directed towards specific learning strategies in, for example, class assignments.

Laurillard's idea of context dependent learning suggests that the degree to which learners and teachers have the potential to influence the process of learning depends on situational factors. However, Laurillard also takes into account the idea that personality factors and individual characteristics may affect students' learning process and their approaches to learning: as previously mentioned, students have individual characteristics such as motivation and personality factors, which may contribute to the students' individual learning styles. Also Montgomery and Groat acknowledge the existence of individual factors that affect students' learning strategies. Even though Montgomery and Groat explore learning and teaching as an interaction, they consider student-centred aspects of the phenomenon, and how they may influence these interactions.

Good vs. Poor Learners

Chi, Bassok, Lewis, Reimann & Glaser (1989) explored learning styles in terms of "good" versus "poor" learners. Students in two categories ("good" learners and "poor" learners) performed problem-solving tasks. "Good" students' learning styles included understanding the issue by generating multiple explanations and example solutions, which can then be related to the problems that are being solved. "Poor" learners rely heavily on examples, and they do not monitor their learning accurately. Chi et al. also noted that individual learners require different teaching styles, in order for them to reach their full potential. For example, it was noted that as feedback can contribute to "good" learners' performance, it may, in contrast, hinder poor learners' performance. It is not clear whether the learning style a student adopts stems from individual factors, or whether it is something that has been influenced by past experiences, and past teaching styles. However, the results support Montgomery and Groat's (1998) ideas: individual students require different teaching styles in order to achieve the best results.

"Good versus bad" learning styles can also be examined in relation to intrinsic and extrinsic motivations. For example Deci & Ryan (1985) define intrinsic motivation as being motivated to do something because it is enjoyable and interesting. Extrinsic motivation, in turn, means being motivated to do something because it leads to a desirable outcome, such as a reward. Intrinsically motivated students achieve higher results (Deci, Vallerand, Pelletier & Ryan, 1991). Perhaps being motivated improves grades as a result of motivated students being more likely to apply "good" learning styles, such as those presented in Chi et al. (1989).

If learning styles are influenced by motivational factors, the importance of teacher must be considered in this context. Even though intrinsic motivation stems from a personal interest towards a subject or topic being studied, a teacher may potentially guide the students' interests by introducing the material in creative ways, and directing teaching towards individual needs and interests of students, where possible. As mentioned earlier (see section 1.1.2), previous research has discovered that the teacher's approach to teaching in class

can affect students' learning: good teaching results in so-called 'deep' learning styles (Trigwell & Prosser, 1991; Ramsden, 1992).

Chi, Roy & Hausmann (2008) provide another interesting contribution to this discussion. Chi et al. found that collaboratively watching a videotape of a tutoring session was as effective considering learning outcomes as being tutored individually. These results emphasise individual learning strategies over teacher's contributions: if videotape is being watched, the students may use their own learning style in their personal interpretation and use of the material. The teacher presents the material, but the students are free to use it in their learning in a way that is best appropriate for their individual learning purposes. Chi et al.'s findings suggest that perhaps teachers contribute less to the learning process than believed. If watching the tutorial on tape with another student results in similar outcomes, the role of student-centred approach to learning is emphasised. It is possible that this is an indicator of the importance of individual approaches to learning: when watching a tape of a tutorial, students may be able to apply their learning styles better than if participating in the tutorial, which is a more controlled situation.

However, examining learning styles in the context of teacher and learner contributions seems to bring support for Laurillard's (1993) model. Overall, a majority of previous research presented above suggests that both teachers and learners play a role in the learning process. Interestingly, also learning styles seem to stem from both student-centered factors, as well as teacher's contributions. Factors that influence approaches to learning can indeed be seen as a part of an interaction between learner and teacher: learning styles are individual, but good teachers may inspire students to look at issues from a new viewpoint, which can in turn have an impact on students' motivation and learning styles.

Conclusion

Laurillard's model (1991) claims that in order to obtain **maximum benefits from the learning process there must be an equal contribution of the learner and teacher**. Laurillard argues that learning should be viewed as a dialogue between teacher and learner which is influenced and manipulated by the teacher to accommodate for the student's ability, previous knowledge and experience. A critique of the model lies within its assumption that the learner is capable of understanding learning and has already obtained skills of autonomy. The Stage Self-Directed Learning model by Grow (1991) accounts for this and explains how teachers are active at every level of learning but move from a teaching role to a participatory role whereby they encourage the self-direction and autonomy of learning and prepare students for learning outside the classroom. Another area of contention lies within the contribution of peer discussion. Evidence from Chi et al. (2008) strongly supports the benefits of peer discussion to maximise learning potential.

Overall the contribution of a teacher and learner in the learning process can be strongly impacted by:

- the teacher training experienced
- the skills of autonomy a student possesses
- the developmental capacity of the learner
- the assessment of learning
- the diversity of a classroom
- the topic of discussion
- the type of motivation a student possesses

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