Appreciative Inquiry in Medical Education

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Abstract

The practice of medicine, and also medical education, typically adopts a problem-solving approach to identify "what is going wrong" with a situation. However, an alternative is Appreciative Inquiry (AI), which adopts a positive and strengths-based approach to identify "what is going well" with a situation. The AI approach can be used for the development and enhancement of the potential of both individuals and organisations. An essential aspect of the AI approach is the generative process, in which a new situation is envisioned and both individual and collective strengths are mobilised to make changes to achieve the valued future situation. The AI approach has been widely used in the world of business and general education but is has an exciting potential for medical education, including curriculum development, faculty development, supporting learners through academic advising and mentoring, but also for enhancing the teaching and learning of both individuals and groups. This AMEE Guide describes the core principles of AI and their practical application in medical education.

Practice Points

- Appreciative Inquiry (AI) provides a positive and strengths-based developmental approach for both individuals and organisations to achieve their potential.
- The strength of both individuals, and also the organisations in which they are integral members, can become mobilised to create a vision for change that is considered to be important to themselves and also to their organisations.
- The AI approach has been widely used in the world of business and general education
- The AI approach has an exciting potential for medical education, including curriculum development, faculty development, supporting learners and enhancing teaching of individuals and groups.

Introduction

A problem-solving approach, in which making a diagnosis is based on a series of questions that ask about "what is going wrong" with a situation, is typical of the clinical practice of medicine. A similar approach is also frequently applied to many aspects of medical education, from developing a new curriculum to supporting students in difficulty. However, an alternative approach is Appreciative Inquiry (AI), with a focus on "what is going well" with a situation. The AI approach requires an alteration in the mind-set of the person asking the questions, with the key aim of mobilising individual and collective strengths to change the current situation. An essential aspect of the AI approach is the generative process, which occurs through collaborative discussion, of envisioning a new situation. This process taps into the factors that individuals consider to be important for themselves and others, with the result that the potential of individuals, and also the organisations in which they are an integral member, can be developed. We consider that AI is at the heart of medical education but there has been little published work on the application of AI in medical education.

The AI approach has been enthusiastically used over the last few decades for organisational development (Watkins & Mohr 2001), and is also increasingly being applied in the world of business for the development of individuals, including leadership development (Hart et al., 2008) and mentoring (Gordon 2008). Over the last decade, AI has also begun to be applied as an important guiding principle within general education.

In this article , we describe the core principles of AI and their practical application in medical education to inform curriculum reform, as a creative approach for faculty development, as a foundation for "appreciative education" and "appreciative advising", and to inform medical education research.

The principles of Appreciative Inquiry

The essence of AI is that of a positive and strengths-based approach to introduce change in a current situation to achieve the potential of individuals and organisations.

The core principles of AI

Five core principles that underpin the practice of AI have been described and are based on extensive practical experience in organisational development (Cooperrider et al., 2003). These principles are:

1. The constructionist principle: Fundamental to this principle is the view that an individual creates, or constructs, the reality of their world through an active process of interaction and discussion with other people. For example, the deficit –view is that a glass is considered to be half-empty but this can be positively co-constructed to be regarded as half-full.

2. The simultaneity principle: This principle considers that inquiry and change are not separate processes. Whenever there is inquiry, and questions are asked about a topic, there is a simultaneous beginning of a change process since new insights and understandings will influence how the topic is viewed in the future.

3. The poetic principle: In reading poetry, people focus on making meaning from the words. In AI, the deficit-focussed words can constrain not only how the topic is understood but also the possibilities for change. An essential aspect of AI is the reframing of current views of a situation.

4. The anticipatory principle: The envisioning of future potential changes creates a feeling of control over a difficult situation and enhances their motivation to change the situation.

5. The positive principle: This principle underpins all of the other AI principles and also all parts of the AI methodology. The concept is that questions that seek to identify strengths engage people in positive change.

The methodology of Appreciative Inquiry

The original methodology of AI was for organisational development and used the "4-D" cycle (Cooperrider et al., 2003). This method is still widely in use, although recently the "5-D model" has been introduced (Watkins et al., 2011), with an additional "Definition" phase that precedes the four phases that are found in the 4-D cycle. This additional phase essentially defines "is this worth doing"?

Figure 1 describes the main phases in the 4-D cycle, along with the purpose of each phase and the typical questions that are asked. The generic questions that can be readily adapted to the particular context and application.

Figure 1 :

The main phases in the 4-D cycle.

Phase	**Purpose of phase**	**Typical questions**
Discovery	The identification of processes that work well.	"What is working well?" "What is good about what you are currently doing?" "What have been the best times or best experiences?" "What do you value (about yourself, your work, your organisation)?"
Dream	Envisioning what the current situation could be like in the future.	"What might the situation be like? " "What would it look like if it were working well all the time?" "What would the ideal future situation be like?" "If you had a wish, how would the situation be different?"
Design	Planning and prioritising processes that would work well.	"What needs to be done differently to achieve your chosen future situation?" "What resources are required, or who can help you, to achieve your chosen future situation?" "What do we need to do to realise that future?"
Destiny (or Deliver)	The implementation (execution) of the proposed design.	"How can we sustain what we are doing?"

		"What needs to be done to ensure that the changes continue?" "How can we make it happen?

The application of Appreciative Inquiry principles to education

There have been three main trends in the application of AI principles in education: Appreciative Education, Appreciative Pedagogy and Appreciative Advising.

Appreciative Education

Appreciative Education can be considered to be "a framework for delivering high quality education on both an individual and organisational level. It provides an intentional and positive approach for bettering educational enterprises by focusing on the strengths and potential of individuals and organisations to accomplish co-created goals " (Bloom et al 2013 p 5-6).

Appreciative Pedagogy

Similar to the concept of Appreciative Education is the concept of Appreciative Pedagogy, with the adaptation of AI principles to inform all teaching and learning activities, whether these activities are only a short 20 minute, one to one session, a one hour workshop or a whole programme (Yballe & O'Connor 2000).

Appreciative Advising

The principles of AI have been applied to Appreciative Advising, with a focus on supporting College students who are experiencing a variety of academic difficulties.

The practical application of Appreciative Inquiry in Medical Education

Many practical applications of AI can be envisaged within medical education, from individual and group teaching and learning endeavours, to the development of educational organisations, with the enhancement of curricula and development of faculty members.

Working with individuals

The principles of AI, with its generative and strengths-based focus, can infuse all interactions with a learner. Roarty and Toogood (2014) offer some useful and practical tips on how AI principles can be used to structure all learning conversations:

1. Identify an outcome focus. A clear outcome focus, or goal, is associated with increase of internal motivation to mobilise their strengths to achieve their own desired outcome (Covington 2000).
2. Focus on what is already working well. An essential aspect of AI is to build on current strengths to achieve intended goals.
3. Reframe any "weaknesses" into strengths to be developed. The act of reframing can produce a marked change in an individual's self-esteem that internally motivates the learner. Inappropriate attributions about ability can quickly produce negative

emotions that result in a spiral of decreasing motivation and performance (Weiner 1985).

Working with groups

The 4-D cycle of AI has been applied to the experiential learning cycle and problem-based learning. Evaluations of these applications have shown increased motivation and engagement by students in the learning process, an increase in positive attitudes towards other students and the teacher, and more relevant and personally meaningful concepts (both academic and personal) being identified (Yballe & O'Connor 2004, Conklin 2009, Roberts 2010)

(a) Application to Experiential Learning

An important aspect of Experiential Learning is the identification of the question for inquiry and the process of inquiry, with traditional Experiential Learning having a focus on problem solving. Neville (2007) proposes that AI can be used as a complementary approach to Experiential Learning, with a focus on solutions. For example, the question for inquiry can be reframed from "What is the biggest problem in improving patient safety?" to "What approaches have been used to effectively improve patient safety?" An illustrative of the use of AI in Experiential Learning to teach professionalism is shown in Figure 2 (Available online on the Journal website as Supplemental Material).

(b) Application to Problem-Based Learning

Typically, PBL has a focus on the identification of a problem to produce a solution and Roberts (2010) discusses the limitations of PBL in the context of occupational therapy, especially the focus on what is wrong or dysfunctional. Figure 3 (available online on the Journal website as Supplemental Material) describes how AI can be integrated into PBL in an attempt to develop a more client-centred and strengths-based approach.

Appreciative Advising

The usual approach to help learners who are experiencing difficulties in their academic studies is often a "deficit remedial education model" which has a focus on the identification and remediation of their weaknesses instead of their successes (Kramer & associates, 2007). However, in contrast, the advisor could adopt a strengths based model that increases the learner's self-efficacy beliefs about possible change and motivates the learner by helping to identify how previous coursework successes were achieved.

Academic Advising using a model of six phases within an overall AI approach (Bloom et al, 2008) is illustrated in Figure 4 (available online on the Journal website as Supplemental Material).

Appreciative inquiry for curriculum development

AI can provide a useful method for curriculum development in medical education, including evaluation and quality improvement that builds on current strengths (Chacko 2009).

An illustrative example of the development of a socially accountable medical school curriculum is provided in Figure 5 (available online on the Journal website as Supplemental Material). The AI approach offers a potentially useful method to respond to the complexity of this challenge.

The AI approach also lends itself to tackling a negative culture to change in the curriculum. An important aspect of curriculum development is course evaluation but often this is by a simple questionnaire, with both students and staff concentrating on problems instead of the strengths of the curriculum. Figure 6 (available online on the Journal website as Supplemental Material) illustrates successful use of an AI approach for curriculum development and cultural change.

Appreciative inquiry for faculty development

Steinert (2000) has highlighted come of the key challenges for faculty development, including the need to effectively respond to changes in both medical education and health care delivery as well as to the roles of faculty members. Responding to this challenge requires an appropriate method and AI has an exciting potential for faculty development by using a generative and strengths-based approach.

Figure 7 (available online on the Journal website as Supplemental Material) illustrates how an AI approach was used as one of the main methods for the development of faculty and residents in a US medical school to ensure that all medical students would witness a high level of professional behaviours in the academic and clinical teaching staff (Fryer-Edwards et al 2007).

Appreciative Inquiry for medical education research

There has been increasing interest in the use of participatory research methods in educational research, with a focus on collaboratively working with a range of stakeholders, from students to teachers and administrators, with the intention of addressing questions and issues that are significant to these stakeholders (Cohen, Manion & Morrison 2013). An essential aspect of this research method is empowerment of the stakeholders so that they become active participants in the research process. The intentions of the AI approach are similar to the focus of participatory research methods and AI has been applied to general educational research, especially to structure interviews.

An illustrative example of the use of the principles of AI to structure interviews in general educational research is the work of Michael (2005) on the experiences of being a school teacher. Questions were asked that were related to the Discovery phase of the AI cycle, such as "What's your favourite memory of working here?", " What do you like best about your job?", "What do you think is at the heart of your organisation's success?" and "What makes your organisation special, or different from other organisations that you know?". He noted that participants were eager to tell their stories and were more open to disclose unrehearsed information, including greater understanding of the factors that impacted on the positive experiences that they wanted to experience. An interesting aspect was that participants began to feel empowered during the interview to change their current teaching practice, with spontaneous movement towards the Dreaming phase as their interviews progressed. Similarly, Giles and Kung (2010) also used AI to explore the professional practice of a lecturer in higher education by identifying their peak experiences as an educator through the use of written reflective accounts that were discussed with a researcher. In addition to the Discovery phase in the discussion, the researcher also began the Dream and Design phases with generative discussions to empower the teacher to transform their professional practice.

There has been little application of the AI approach to specifically research medical education but it offers a potentially useful and innovative participatory method. An illustrative example of the use of a group participatory AI approach to understand the professional use of social media in medical education is shown in Figure 8 (Pereira et al 2015).

Personal development to use of Appreciative Inquiry in medical education

The main change is a mind-set that has a focus on identifying personal strengths, providing increased motivation and emotional energy to change but also enhanced resilience, satisfaction and self-esteem (Reeve 2014). This approach is in contrast to the traditional focus on identifying "weaknesses", with its negative connotation and subsequent draining of emotional energy and reduced motivation. A strengths-based and appreciative mind-set does not ignore "weaknesses" but reframes this situation as being a strength that needs developing, such as to increase particular knowledge or skills. In addition, there is identification of existing strengths that will be required to be mobilised to achieve the desired outcome.

There are two practical methods for the identification of personal strengths:

1. Reflect on personal strengths after any event, such as a teaching session or a curriculum development-planning meeting.
2. Seek feedback from others about what they notice about the strengths that have been used, and especially how these strengths have influenced change in others or a situation.

An important role for any medical educator is leadership, whether "micro" in a teaching session or "macro" with a formal leadership position in an institution (Srinivasan et al.,

2011). The personal effectiveness of leaders can be increased by having a strengths based mind set that is applied to their practice (Roarty & Toogood 2014).

Conclusions

The AI approach provides a unique and innovative developmental opportunity for both individuals, and the organisation in which they are an integral member, to identify and mobilise individual and collective strengths to achieve their individual potential and that of the organisation. An essential aspect of the AI approach is the generative process, in which a new situation can be envisioned and motivational energy is created to achieve the desired future situation. This process is at the heart of all personal and organisational development.

There is an exciting potential for the AI approach to become increasingly used in medical education, including curriculum development, faculty development, supporting learners through academic advising and mentoring, but also for enhancing the teaching and learning of both individuals and groups. The AI approach can also inform the methods used in medical education research.

The potential of the AI approach will only be fully realised if the principles and their application are closely followed, but also that there are opportunities for the identified change in situations to be effectively implemented.

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