From evaluation to reflection-on-action: Lessons learnt from the impact of a distance education programme

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Abstract

Reflection-on-action is necessary to derive meaning from one's experiences. This article revisits research data from an elongated study on the impact of a distance education programme on the professional practice of graduates. The study focused on 300 graduates and 128 principals, selected through multi-stage and purposive sampling. The researcher used a mixed-methods research design with specific focus on Kirkpatrick's (1996) and Baldwin and Ford's (1988) training evaluation models. The researcher's curiosity was triggered by the need to understand possible reasons for the participants' views, as these are contrary to the norm. This account indicates a clear institutional policy on quality assurance, practices guided by the policy, an ongoing monitoring of the distance education students' profiles, improved programme design, student support structures, programme design and research focused on programmes as possible reasons. The author argues that higher education practitioners, irrespective of delivery mode, could benefit from the valuable lessons learnt from the exercise.

Keywords: distance education, evaluation, impact, professional development, quality, reflection, reflection-on-action

INTRODUCTION

Although higher education is involved in quality assurance at various levels, a main concern related to quality systems is the lack of a programme evaluation dimension (Mizikaci 2010). Evaluation means to understand the value of something in order to do things better (Rubin 1995). Furthermore, evaluation is a tool for decision-making and for assessing and promoting the quality of a programme (Wilson-Strydom 2004). Evaluation in higher education usually focuses on the aims of a programme and investigates to what extent the intentions of the programme initiators are being realised (Hall and Hall 2004).

Scholars are divided on whether evaluation differs from research (Wilson-Strydom 2004). However, Patton (1990) stresses that when one systematically and empirically examines and judges accomplishments and effectiveness through careful data collection and thoughtful analysis, one is engaged in evaluation research. Although evaluation is a valuable process, it is more important to learn from such an exercise. One of the tools for such learning is reflection, which is also known as reflective practice. Reflective practice requires a professional to step back from an experience to make sense of it, understand what it means, learn from it and apply that learning to future situations (Britton 2010).

Although it has been proved that distance education provides wider access, the mode is not without its challenges in terms of its effectiveness, impact on students' professional development and efficiency in delivery (Harreveld 2010).

Feedback from a longitudinal study (Aluko 2009, 2012; Aluko and Shonubi [n.d.]) on the impact of a distance education programme: the Advanced Certificate in Education: Education Management (ACE: EM), showed that graduate-participants were of the opinion that they benefited immensely from the programme. The researcher was interested in investigating possible reasons for their positive views.

This reflection was never part of the longitudinal study, but the data from the study triggered the researcher's curiosity, especially considering the fact that one of the main concerns of distance education programmes among stakeholders is the quality of such programmes (Belawati and Zuhairi 2007). This led to the following questions: Why did graduate-participants judge the programme as beneficial to their personal and professional life with confirmation from their principals? What has made it possible for the programme to meet its goals? What possible lessons could be learnt? The author argues that such lessons could be applied to the management of all educational programmes in higher education, irrespective of their delivery modes.

FROM PROGRAMME EVALUATION TO REFLECTION: CONCEPTUALISING THE PROCESS OF REFLECTION

By three methods we may learn wisdom: first, by reflection, which is noblest; second, by imitation, which is easiest; and third, by experience, which is the bitterest (Confucius).

Programme evaluation is an important activity that relates directly to quality (Wilson-Strydom 2004). Institutions need to attend to the twin issues of quality assurance and quality control (Mugridge 1999). Thus, evaluation is not an end in itself, but should rather be used as a means to maintain or improve the quality of products and processes (Rathore and Schuemer 1998). It is incumbent upon education providers to ensure that an institutional climate that encourages continual review and evaluation, supported by policies and procedures, is in place (Mugridge 1999). There is a need for a culture of quality in higher education institutions (HEIs) by which all stakeholders are empowered to be responsible (Aluko 2007). In the process of evaluation, one of the learning tools available to an evaluator is reflection.

The definition of the term 'reflection' is slippery due to its elusive boundaries (Jay and Johnson 2002). Nonetheless, Dewey (1933, 9), provides one of its earliest definitions as the 'active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further

conclusions to which it tends'. Reflection is thinking with a purpose. For this reason, all evaluation is a form of reflection (Hall and Hall 2004). Reflection-in-action helps practitioners to think about what they are doing while engaged in the process (Schön 2011), while reflection-on-action concerns reflecting on past actions (Hall and Hall 2004). Scholars are of the opinion that reflection-on-action encourages the scope and depth of reflection because of the lack of opportunity to stand aside from the dynamics of an activity while it is in process (Boud, Keogh and Walker 1985; Schön 2011). These should be regarded as complementary since it is difficult to separate action from thought (Moon 1999). This article, however, focuses on reflection-on-action.

Evidence available from the extant literature shows that a trigger for reflection is often a state of discrepancy between reality and expectation (Pammer et al 2012). With regard to the current article, findings from the longitudinal study that triggered the researcher's reflection showed a discrepancy between the participants' impressions (that the programme has added value to their lives and their workplace) and the impression considered to be the norm (that distance education programmes are not of good quality).

BACKGROUND TO THE ARTICLE

As indicated previously, the article emanated from a longitudinal study on the impact of a distance education teaching programme on the professional practice of graduates. The University of Pretoria (UP) is a contact teaching and research institution, which began to offer distance education programmes through its Faculty of Education in 2002. Its target population was teachers, especially those in rural areas, where a university presence was not strongly felt. Students enrolled in the programme were mostly female, over 40 years of age, with little or no access to modern technology. In 2006, one of the requirements the Council on Higher Education (CHE) demanded of UP (2006) was to evaluate the impact of its ACE: EM programme. Accordingly, in 2007, the researcher conducted a pilot study on behalf of the institution, followed by a longitudinal study between 2009 and 2012. The programme has recently been discontinued due to the South African government's decision to encourage teachers to focus on teaching subjects with the aim of improving their classroom practice (CHE 2010).

For the longitudinal study, the researcher adopted a mixed-methods research design, using both surveys and interviews to capitalise on the strengths of both qualitative and quantitative methods (Punch 2005). Prospective participants were identified through multi-stage and purposive sampling techniques (Punch 2005), and were drawn from the major provinces from which students enrolled for the programme (Gauteng, Eastern Cape, KwaZulu-Natal, Limpopo and Mpumalanga). A total of 300 graduates and 128 principals participated in the study. Interviewees were identified for the interviews from the surveys returned by participants.

In order to ensure the content validity of the instruments, the researcher focused on the stated programme outcomes at national and institutional levels, combined with the graduates' aspirations (Aluko 2009). The training evaluation models of Kirkpatrick (1996), and Baldwin and Ford (1988) were adapted to further probe the contextual factors that determine the extent of learning transfer (Aluko and Shonubi [n.d.]). The researcher received an ethical clearance certificate from the Faculty of Education's Ethics Committee, and sought permission from the different provincial departments of education.

The *Atlas.ti* 5.0 (Computer-assisted Qualitative Data Analysis software) was used to analyse the interview transcripts. Relevant quotations and codes were identified based on the concepts and themes frequently mentioned by interviewees (Hardy and Bryman 2004). The quantitative aspects of the questionnaires for the longitudinal study were analysed by UP's Department of Statistics. It arrived at the cumulative frequencies and cumulative percentages. The data was revisited as a result of the researcher's curiosity to investigate possible reasons for participants' positive comments about the programme. This was triggered by the contrast of these views to the seemingly persistent negative view regarding the quality of distance education programmes by some stakeholders.

THE CYCLIC PROCESS OF REFLECTION AND ITS APPLICATION TO THE ARTICLE

Scholars have expatiated on Dewey's (1933, 1938) work by attempting to identify the process of reflection (Boud et al 1985; Jay and Johnson 2002; Lee 2005; Pammer et al 2012; Rodgers 2002). However, Jay and Johnson (2002) summarise the process of reflection as involving several common processes, namely: describing the situation; surfacing and questioning initial understandings and assumptions; and approaching the subject with persistency, an attitude of open-mindedness, responsibility, and whole-heartedness. According to the scholars, individuals evaluate the insights gained from this process with reference to: additional perspectives; their own values, experiences and beliefs; and the larger context within which the questions are raised. The process of reflective practice thus brings together the skills of self-understanding, critical thinking, analysis and experience-based learning (Barefoot Collective 2009). After careful consideration of the scholars cited above, the researcher identified the following as the process of reflection to be focused on. These are briefly explained and applied in the following sections.

The content of reflection

The content of reflection stage can also be termed the experience stage. In the workplace learning environment, this is work-related and therefore becomes the content of reflection (Pammer et al 2012). What gives an experience value is the meaning that the individual perceives in it and then constructs from the experience (Dewey 1938). Experiences alone are not enough; the ability to perceive and then

weave meaning among the threads of experience is critical (Rodgers 2002). With reference to the current article, the researcher's experience was the study conducted regarding the impact of the ACE: EM programme on the professional practice of graduates.

Returning to the experience

An experience exists in time and is therefore linked to the past and the future. It is triggered by curiosity, without which there is little energy for the hard work of reflection (Rodgers 2002). People can only think reflectively when they are willing to endure suspense and undergo the trouble of searching (Dewey 1933). Thus, the researcher had to return to the research data to highlight possible reasons for the participants' perceptions of the quality of the programme, and possible reasons for the programme's positive impact on the participants' professional and personal lives.

Attending to feelings

Building on Dewey's (1933, 1938) work, Boud et al (1985) argue that reflection is not just a process of thinking, but one that essentially involves feelings and emotions. This is because there is a puzzling, troubling or interesting phenomenon with which the individual is trying to deal. While trying to make sense of it, individuals also reflect on the understandings that have been implicit in their actions. These understandings must be surfaced, criticised, restructured, and embodied into further action (Schön 1983). Emotion is an important facet of learning because it affects motivation and the ability to understand what is being experienced (Hinett 2003). Although not classified as one of the basic emotions, curiosity, which led to the development of the article, can induce an emotion (Wikipedia 2014). As curiosity represents a thirst for knowledge, this emotion is a major driving force behind scientific research and other disciplines of human study (Wikipedia 2014).

Re-evaluating the experience

Dewey (1933) refers to this phase as 'intellectualisation'; a process of intellectualising what at first is merely an emotional quality of the whole situation. It is not a casual process, but a disciplined one that demands of individuals to continually ground their thinking in evidence and not overlook important data that may not fit their evolving ideas (Rodgers 2002). With regard to this phase, the researcher's reflection was guided by the data that emanated from the longitudinal study because of its contrast to the generally accepted perception that distance education programmes are of inferior quality. This led to a new and better understanding of the experience and allowed for the derivation of implications, conclusions or lessons learnt, as described by Pammer et al (2012).

Generating possible explanations

The above stage leads to a generalisation and abstraction of the concrete experience (Pammer et al 2012). According to the scholars, this is a core part of the reflective process that differentiates it from repetitive thought and rumination. This stage also demands that individuals refine the suggestions as probabilities, which encourages them to consult resources beyond themselves (Rodgers 2002). In order to generate possible explanations for the findings, the researcher had to critically look into what probabilities the literature offers and into what systems UP has put in place to explain how the programme has managed to attain its outcomes.

The outcome of reflection

Reflection implies that something is believed in (or disbelieved) – this resulting, not of its own account, but of the account of something that stands as witness, evidence, proof, voucher or warrant. This functions as grounds of belief (Dewey 1933, 10). The outcome of the researcher's reflection is presented and discussed in the section that follows.

The literature supports outcomes as being necessary requirements for the success of any educational programme (Aluko and Hendrikz 2012; Commonwealth of Learning 2004; Lomas 2004; Nonyongo and Ngengebule 2008; Pulsipher 2009; Walsh 2009; Welch and Reed 2005). Rodgers (2002) advises that the one who reflects should seek meaning, and create from this a theory to live by. This theory is expected to guide practice until it encounters a situation where the theory no longer serves (Rodgers 2002).

Intelligent action/experimentation

This is the level at which theory is tested (Dewey 1933). This experimentation, which involves interactions between the self, others and one's environment, in turn serves as the next experience from which learning can continue. Dewey called this phenomenon continuity. Even though the lessons identified in the article are part of UP's day-to-day affairs, it is necessary to share these lessons with education practitioners. Hopefully, these will help to ascertain whether the meaning ascribed to the experiences fits, makes sense, and can be relied on in future experiences (Rodgers 2002). Nevertheless, as advised by the same author, the researcher does not rule out the fact that more questions, problems and ideas will arise in the process of continually monitoring the quality of the programmes run by UP.

OUTCOMES OF THE RESEARCHER'S REFLECTION AND ITS IMPLICATION FOR MANAGEMENT PRACTICES IN HIGHER EDUCATION

Reflection has the potential to lead to a better understanding of one's own work practice and work-related experiences, and can guide future behaviour (Pammer et al 2012). This reflection-on-action account shows that the programme has benefited from the following aspects. These are elucidated in the following sections.

A clear institutional policy on quality assurance

Management provides the framework for the policies, procedures, practices and leadership of an organisation (Mizikaci 2010). As indicated previously, quality is a major concern in distance education. From the onset, UP decided that, if its distance education programmes could not conform to the same quality standards as its contact programmes, it would rather not run them at all. A clear institutional policy on quality assurance becomes important in higher education. The absence of this becomes more pronounced in distance education in light of persistent negative perceptions of the quality of its programmes, not just among outsiders, but also among academics (Du Plessis and Van der Merwe 2005; Perraton 2007; Porto and Berge 2008). This means that providers need to focus on ensuring quality if they want their programmes to be successful.

At UP, quality is seen as a priority. It is an iterative process and is considered to be part of a philosophy that pervades the university's managerial, teaching and administrative styles, irrespective of the mode of delivery (UP 2009). In order to enhance quality, it is of the utmost importance that HEIs create awareness among relevant stakeholders and involve them in the process. This is very advantageous as it serves, for instance, as a way of giving students a voice, and at the same time helps the institution to increase its accountability (Lomas 2004).

McNeese State University (2006) defines an institutional policy as a policy with a wide scope that has the potential for campus-wide impact. One of the areas in which HEIs need to take a stance regards quality. Quality became a key occupation of higher education policies in the 1980s (Walsh 2009). In its survey of 11 Western countries, the Centre for Higher Education Policy Studies (CHEPS) (2004) observed that the concern for the quality of higher education is an ongoing issue in many countries, but that it seemed to have moved away from being a top priority.

One of the challenging areas with regard to the quality of distance education is that of completion rates. Scholars have, however, warned that this should not be taken out of context as there are particular reasons for it being more prevalent in this mode of delivery, and must therefore be interpreted in line with other factors (Aluko 2007; Tucker 2001). However, it appears from the lessons learnt from this programme, that it is possible for institutions to have a firm grip on student retention rates if more attention is paid to the quality of distance education programmes. Table 1 supports this statement.

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Year	Students who discontinued their studies	Percentage of total enrolment		
2006	419	4%		
2007	650	4%		
2008	584	3%		
2009	762	4%		
2010	430	2%		
2011	650	3%		
2012	689	4%		

Table 1: Non-completion rates of distance education students at UP (All programmes)

Source: University of Pretoria (2010–2012)

It is evident from Table 1 that the highest non-completion rate of distance education students at UP is 4 per cent. Unfortunately, this is not a common phenomenon in distance education programmes due to the peculiar characteristics of this mode of delivery (Antony and Gnanam 2004; McKenzie and Schweitzer 2001; Singh 2000).

Practices guided by the policy

Something that is relevant to the ideas stated above is the importance of a policy guiding actual practices and not just those existing on paper. Welch and Reed (2005) have stressed that a formal commitment by the government is crucial to quality in the distance education delivery mode. The South African government has identified this mode as being paramount to redressing the imbalances of the past (Department of Education 1996). It has, through a research team, developed a distance education quality standard framework for South Africa, with the aim of correcting observed anomalies (CHE 2004c). However, it was not until May 2012 that it came up with a draft policy document on distance education that has yet to be finalised.

Relevant and specific policies regarding distance education become important in light of the fact that the criteria of the CHE's Higher Education Quality Committee (HEQC) for programme accreditation, which all higher education programmes are expected to meet, irrespective of the mode of delivery, do not sufficiently meet the needs of distance education (Welch and Reed 2005). However, the National Association of Distance Education Organisations of South Africa (NADEOSA), in conjunction with providers of distance education in the country, have developed quality criteria that guide the practice of this mode of delivery (Welch and Reed 2005).

The Unit for Distance Education (UDE) at UP developed its policy document on distance education from these quality criteria and this policy guides its practices (UP 2009). Other documents that have guided its policy included the Commonwealth of Learning's (2004) *Planning and implementing open and distance learning systems* and the CHE's *Criteria for institutional audits* (2004a) and *Criteria for programme accreditation* (2004b). Nevertheless, the researcher believes that having a policy in

place is not as important as putting what has been determined into practice. Since the essence of policy is to ensure and improve quality, Welch and Reed (2005) have warned that quality is not fixed and static, but develops with changes in education thinking and practices, as well as with advances in technology.

An ongoing monitoring of the distance education students' profiles

University policy-makers need quality data in order to make data-driven decisions regarding programme improvement to accomplish their stated mission, among other things (Pulsipher 2009). Some of the data kept by the UDE at UP includes students' age, access to technology, work and geographical profiles, and graduation and retention rates. Managers can make better and more informed decisions when they have access to quality data (Pulsipher 2009).

For instance, keeping track of students' profiles has helped the UDE to decide on the form of delivery to adopt for the programme and which venues to make available for contact sessions. Table 2 reflects the changing technology profile of distance education students.

Year	2004	2006	2007	2008	2009	2010	2012
Number of students	3 187	5 087	5 643	8 01 1	6 102	5 675	3 354
Cellphone use	98%	99%	99%	99%	99%	99%	100%
Internet use	0%	2%	1%	3%	8%	13%	25%

Table 2: Profile of students who enrolled for the first time between 2004 and 2012

Source: University of Pretoria (2010–2012)

From Table 2, it is clear that the cellphone profile of the students has remained constant over the years (2004 to 2010) with a slight increase in 2012 (100%). The internet profile increased from 0 per cent in 2004 to 25 per cent in 2012. These monitored changes (UP 2010–2012) have informed the UDE's choice of supporting students through mobile phones, while other options are being explored as a reaction to students' increased access to the internet.

Student support structures

Simpson (2000, 6) has defined student support structures in the broadest terms as 'all activities beyond the production and delivery of course materials that assist in the progress of students in their studies', which can include both academic and non-academic services. In distance education teaching models, greater emphasis is placed on the quality of student support services, because most students who enrol for distance education programmes from traditional learning backgrounds are ill-equipped to handle the unique demands of studying at a distance (Lowe 2005).

UP is well aware that studying at a distance while working full-time is difficult, thus, it developed extensive academic support structures to help students to succeed in their studies (UP 2009). These include long and short contact sessions, tutorial letters, assignments, short message service (SMS) and an academic enquiry service. Unfortunately, most of the students enrolled in UP's distance education programmes have up to now resided in rural areas with little or no internet connection. There is a need for HEIs to provide support structures that are relevant to their students' contexts (Aluko and Hendrikz 2012). Attesting to the importance of these structures, Nonyongo and Ngengebule (2008) stress that effective learner support is likely to contribute to the quality of distance education programmes.

Programme design

UP redesigned the ACE: EM programme in 2007 with the goal of promoting access to distance education; providing quality distance education; and providing effective student support (Fresen and Hendrikz 2009). According to the scholars, when a learning programme is reconceptualised, it is necessary to consider the purpose of the programme, its structure, the articulation between modules in the programme, the learning activities, the support material and the assessment strategy. All these were taken into consideration when redesigning the ACE: EM programme, while the redesign methodology now guides similar projects (Fresen and Hendrikz 2009). To attest to the quality of the design of the ACE: EM programme, one of its modules (Organisational Management 2) won the Biennial Quality Courseware Awards in 2010.

It has been established that most open and distance student learning occurs independently of the teacher's presence. Students focus primarily on engagement with the material they receive (Evans 1997; Welch and Reed 2005). Although modern technology has taken over the delivery of distance education programmes, most countries in Africa are still trapped in the first-generation mode of delivery. Therefore, the onus is on providers of distance education to improve on the quality of their programme design.

Research focused on programmes

Research focused on programmes situated within the delivery mode help HEIs to obtain detailed information about the programme activities and the effectiveness of the programme from the viewpoint of various stakeholders (Mizikaci 2006). The UDE at UP has a dedicated research office that conducts both operational and academic research into its distance education practices. The major aim of research in the UDE is to inform practice, while outcomes are presented at conferences and are written up as research papers.

Research in distance education has moved beyond comparison between the mode and its conventional counterpart. Attention is increasingly placed on how research can be used to inform practice, which the researcher believes should stem from the internal research structures put in place at the institutional level. Scholars have advised that research in distance education should focus more on students' success and should be learning-centred. This would likely sensitise faculties to the individual student and prepare them to facilitate distance education (Diaz 2000; Lockee, Moore and Burton 2001).

According to Lee, Driscoll and Nelson (2004), understanding trends and issues in terms of topics and methods is paramount in advancements in research into distance education. One of the most important areas in need of research in distance education is the evaluation of programmes; and even when this is carried out, scholars have been encouraged to use not only the quantitative approach, but rather to use the mixed-methods approach (Aluko 2009; Fahy, Spencer and Halinski 2007; Mizikaci 2006). Such studies must also be grounded in sound theoretical and conceptual frameworks (Saba 2000), which should be used as a guide for action (Magagula 2002).

CONCLUSION

Although higher education is involved in quality assurance at various levels, a main concern related to quality systems is the lack of a programme evaluation dimension (Mizikaci 2010). Programme evaluation is an important activity that relates directly to quality. The researcher's initial intent was to evaluate the impact of the ACE: EM distance education programme at UP through a longitudinal study (Aluko 2009; Aluko and Shonubi [n.d.]). Graduate-participants in the study indicated that the programme has added value to their professional practice, to which their principals agreed. However, the data triggered the researcher's curiosity, after considering that one of the main concerns of distance education programmes among institutions and stakeholders is the quality of such programmes (Belawati and Zuhairi 2007).

It emerged that the programme benefited from a clear institutional policy on quality; ongoing monitoring of distance education students' profiles to enable managers to make relevant decisions; good programme design to enhance the quality of the programme; and effective student support structures. Other benefits included dedicated research and a policy on distance education that informs distance education practices at the institutional level.

A particular advantage of distance education is that it makes teacher preparation and professional development programmes accessible to people located in remote, rural areas who do not have convenient access to HEIs (UNESCO 2002). However, quality and quality management are organisational obligations that are vested in management's commitment towards an understanding of quality (Aluko, Fraser and Hendrikz 2008). The literature suggests that the singular reason for mixed reactions to distance education mainly relates to quality (Du Plessis and Van der Merwe 2005).

A clear institutional policy is the starting point to ensure quality in higher education. This helps HEIs to be accountable to relevant stakeholders. In return, it helps to boost student attrition rates - a topic that has long plagued the distance mode of delivery. It is to be hoped that such a policy will not just exist on paper, but will determine providers' practices. There is a need to establish structures that will regularly help to monitor students' profiles. Outcomes of such activities will help

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management to make well-informed decisions. An example of this is the support structures that should be extensive and relevant to students' particular contexts. In addition, well-articulated programme design often goes a long way in attesting to the quality of programmes. Lastly, focused research on distance education practices should aim to make an impact on practices at such institutions. Scholars have stressed that all the valuable lessons that emanate from a reflection like this have probable effects on the overall quality of education programmes, which lead to the improved performance of students (Bates 2005; Bornman 2004; Chickering and Ehrmann 2003; Killen 2002; Magagula and Ngwenya 2004).

In support of the above, scholars (Walsh 2009; Welch and Reed 2005) have stressed the urgent need for providers of the distance mode of delivery to review quality assurance mechanisms for higher education at the national and institutional level, in order to discuss new challenges facing the changing distance education environment, and to build quality assurance capacity to enhance quality standards in a globalised higher education market. One of the ways in which HEIs can do this is by evaluating the impact of their programmes.

Although UP is not a dedicated distance education institution, UP is still in the business of providing distance education. The researcher is aware that the practices that govern the administration of distance education at UP follow guidelines that also reflect the underlying philosophy towards education adopted by the institution. These invariably guide all programmes run by UP, irrespective of their mode of delivery. From these valuable lessons, it could safely be assumed that there is a need for evaluators to practise reflection-on-action more often. Scholars have stressed that this encourages the scope and depth of reflection (Schön 2011). Although curiosity comes naturally to children, a childlike wonder about the world is something that adults often need to cultivate (Rodgers 2012).

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